

Supplemental Table 1. Differences in characteristics stratified by diabetic retinopathy score among diabetes mellitus 1–3 stages

Variables		DM1								DM2								DM3							
		DRS < 20			DRS ≥ 20			p-value	q-value	DRS < 20			DRS ≥ 20			p-value	q_value	DRS < 20			DRS ≥ 20			p-value	q-value
Diabetes	FPG	134.2	±	1.5	156.0	±	6.1	0.001	0.01	124.8	±	1.0	131.3	±	2.1	0.003	0.01	171.2	±	3.1	169.4	±	5.2	0.75	0.91
	HbA1c	7.2	±	0.1	8.0	±	0.2	0.000	0.01	6.6	±	0.0	6.7	±	0.0	0.13	0.33	8.6	±	0.1	8.8	±	0.1	0.10	0.26
Obesity	BMI	26.3	±	0.2	27.0	±	0.8	0.41	0.82	25.3	±	0.2	25.2	±	0.4	0.83	0.93	26.9	±	0.3	26.3	±	0.5	0.26	0.38
Vital sign	SBP	121.9	±	0.8	130.6	±	3.3	0.01	0.08	119.0	±	0.7	123.9	±	1.6	0.002	0.01	119.8	±	1.0	123.0	±	1.7	0.08	0.22
	DBP	76.9	±	0.6	81.8	±	2.3	0.04	0.17	73.9	±	0.5	74.6	±	1.1	0.50	0.73	74.9	±	0.7	75.0	±	1.2	0.99	0.99
	HR	76.7	±	0.6	76.3	±	2.3	0.86	1.00	74.4	±	0.5	76.4	±	1.1	0.09	0.26	77.6	±	0.8	79.7	±	1.4	0.15	0.28
Blood cell	WBC	6429.0	±	82.6	6102.7	±	324.6	0.33	0.70	6112.4	±	81.5	6335.0	±	180.1	0.22	0.45	6780.0	±	138.1	7007.8	±	230.0	0.35	0.47
	RBC	474.5	±	1.7	474.4	±	6.8	0.99	1.02	462.4	±	1.8	453.3	±	4.0	0.02	0.08	478.0	±	3.1	476.4	±	5.2	0.77	0.86
	Hb	14.3	±	0.1	14.3	±	0.2	0.85	1.04	14.1	±	0.1	13.8	±	0.1	0.003	0.05	14.4	±	0.1	14.3	±	0.1	0.93	0.96
	Plt	25.8	±	0.3	23.1	±	1.2	0.02	0.14	23.9	±	0.2	23.9	±	0.5	0.95	1.03	24.9	±	0.4	25.2	±	0.7	0.76	0.88
Liver function	AST	29.2	±	0.8	30.3	±	3.0	0.72	0.91	24.7	±	0.6	24.6	±	1.3	0.94	0.97	29.1	±	1.1	23.9	±	1.9	0.01	0.26
	ALT	36.3	±	1.2	36.5	±	4.9	0.97	1.04	26.5	±	0.9	24.2	±	1.9	0.24	0.51	35.5	±	1.6	28.3	±	2.7	0.01	0.16
	γ-GTP	55.0	±	2.8	54.4	±	11.2	0.95	1.07	40.4	±	2.0	36.8	±	4.4	0.43	0.71	55.9	±	4.8	37.4	±	8.0	0.03	0.13
	LDH	179.8	±	1.6	182.9	±	6.2	0.62	0.87	174.4	±	1.4	174.7	±	3.2	0.92	0.92	175.3	±	2.2	175.8	±	3.6	0.90	0.97
	ChE	384.6	±	3.2	370.5	±	12.6	0.27	0.70	364.0	±	3.0	344.2	±	6.6	0.003	0.02	383.1	±	4.7	364.9	±	7.8	0.03	0.16
	T-Bil	0.94	±	0.02	0.94	±	0.07	0.99	0.99	0.97	±	0.02	0.84	±	0.04	0.002	0.01	0.90	±	0.02	0.86	±	0.04	0.28	0.39
	TP	7.4	±	0.0	7.3	±	0.1	0.50	0.78	7.3	±	0.0	7.3	±	0.0	0.64	0.81	7.4	±	0.0	7.3	±	0.0	0.07	0.21
	Alb	4.3	±	0.0	4.2	±	0.0	0.16	0.44	4.3	±	0.0	4.2	±	0.0	0.005	0.02	4.3	±	0.0	4.3	±	0.0	0.11	0.24
	FIB-4	1.15	±	0.02	1.41	±	0.09	0.01	0.07	1.25	±	0.03	1.37	±	0.06	0.06	0.18	1.20	±	0.04	1.06	±	0.07	0.05	0.19
Lipid metabolism	T-cho	219.6	±	1.7	205.6	±	6.7	0.04	0.17	200.0	±	1.4	197.4	±	3.0	0.39	0.69	208.5	±	2.5	199.7	±	4.2	0.05	0.18
	HDL	58.6	±	0.7	56.4	±	2.6	0.42	0.78	62.9	±	0.7	62.1	±	1.6	0.59	0.69	58.0	±	1.1	60.3	±	1.8	0.24	0.39
	LDL	137.0	±	1.5	127.3	±	5.9	0.11	0.38	118.0	±	1.2	116.9	±	2.7	0.69	0.84	125.6	±	2.1	119.6	±	3.5	0.11	0.25
	TG	144.0	±	6.1	124.2	±	23.8	0.42	0.73	113.6	±	3.5	109.6	±	7.8	0.61	0.85	152.9	±	8.3	117.0	±	13.8	0.01	0.13
Renal function	BUN	13.1	±	0.2	12.7	±	0.6	0.56	0.83	13.7	±	0.2	14.1	±	0.4	0.32	0.60	13.5	±	0.2	13.2	±	0.4	0.50	0.64
	UA	5.4	±	0.1	5.7	±	0.2	0.31	0.72	5.4	±	0.1	5.4	±	0.1	0.71	0.95	5.0	±	0.1	4.7	±	0.1	0.12	0.24
	Cre	0.75	±	0.01	0.72	±	0.05	0.64	0.86	0.75	±	0.02	0.92	±	0.05	0.00	0.02	0.71	±	0.03	0.76	±	0.04	0.25	0.39
	eGFR	77.6	±	0.7	81.9	±	2.8	0.13	0.41	74.8	±	0.7	73.7	±	1.5	0.47	0.72	81.6	±	1.1	84.5	±	1.9	0.15	0.26
Inflammation	CRP	0.25	±	0.03	0.33	±	0.10	0.47	0.78	0.16	±	0.02	0.23	±	0.05	0.18	0.43	0.30	±	0.04	0.14	±	0.07	0.02	0.17
Categorical data	Sex, men	383 (72.3%)			19 (67.9%)			0.62		597 (80.3%)			96 (86.5%)			0.11		235 (78.1%)			79 (84.9%)			0.14	
	Urinary protein, yes	18 (3.4%)			2 (7.1%)			0.35		26 (3.5%)			10 (9.0%)			0.02		27 (9.0%)			12 (12.9%)			0.28	
	Smoking, yes	154 (29.1%)			8 (28.6%)			0.96		193 (26.0%)			32 (28.8%)			0.53		94 (31.2%)			42 (45.2%)			0.01	
	Drinking, yes	325 (61.3%)			19 (67.9%)			0.75		498 (67.0%)			72 (64.9%)			0.65		184 (61.1%)			50 (53.8%)			0.21	

Abbreviations: DM = diabetes mellitus, DRS = diabetic retinopathy score, FPG = fasting plasma glucose, Hb = hemoglobin, BMI = body mass index, SBP = systolic blood pressure, DBP = diastolic blood pressure, HR = heart rate, WBC = white blood cell, RBC = red blood cell, Plt = platelet, AST = aspartate aminotransferase, ALT = alanine aminotransferase, γ-GTP = gamma-glutamyl transpeptidase, LDH = lactate dehydrogenase, ChE = cholinesterase, T-Bil = total bilirubin, TP = total protein, Alb = albumin, FIB-4 = fibrosis-4 index, T-Cho = total cholesterol, HDL = high-density lipoprotein, LDL = low-density lipoprotein, TG = triglyceride, BUN = blood urea nitrogen, UA = uric acid, Cre = blood creatinine, eGFR = estimated glomerular filtration rate, CRP = C-reactive protein.

The FIB-4 index score was calculated using the following formula. FIB-4 = (age × AST)/(Plt count × square root of ALT).

Continuous variables are presented as mean ± standard error by analysis of covariance after adjusting for age and sex. Categorical variables are presented as n (%), and p-values are calculated using the chi-squared test.

The q-values for continuous variables are calculated by modifying the p-value using the false discovery rate method.