

Table 3. Multivariate-adjusted odds ratio for mild cognitive impairment (MCI) in patients with type 2 diabetes mellitus odds ratio for MCI

Overall								
	Model 1 (Unadjusted)		Model 2		Model 3		Model 4	
	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P
Hand grip strength, kg	0.97 (0.95 - 0.99)	<0.01	0.99 (0.96 - 1.02)	0.49	0.99 (0.96 - 1.02)	0.46	0.99 (0.96 - 1.02)	0.52
Walking Speed, m/sec	0.16 (0.08 - 0.31)	<0.01	0.34 (0.16 - 0.72)	<0.01	0.35 (0.16 - 0.75)	<0.01	0.36 (0.17 - 0.79)	<0.05
Skeletal muscle index, kg/m ²	0.73 (0.61 - 0.86)	<0.01	0.76 (0.52 - 1.11)	0.15	0.78 (0.52 - 1.15)	0.20	0.80 (0.54 - 1.19)	0.26
Sarcopenia yes or no	3.63 (1.68 - 7.87)	<0.01	1.51 (0.65 - 3.47)	0.34	1.46 (0.62 - 3.43)	0.39	1.39 (0.59 - 3.28)	0.45

Age < 65 years old								
	Model 1 (Unadjusted)		Model 2		Model 3		Model 4	
	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P
Hand grip strength, kg	1.00 (0.97 - 1.02)	0.74	0.99 (0.94 - 1.03)	0.54	0.98 (0.93 - 1.03)	0.39	0.98 (0.93 - 1.03)	0.46
Walking Speed, m/sec	0.53 (0.15 - 1.89)	0.33	0.62 (0.16 - 2.45)	0.49	0.61 (0.14 - 2.68)	0.52	0.74 (0.17 - 3.28)	0.69
Skeletal muscle index, kg/m ²	0.91 (0.67 - 1.22)	0.52	0.53 (0.25 - 1.11)	0.09	0.50 (0.23 - 1.09)	0.08	0.54 (0.24 - 1.21)	0.14
Sarcopenia yes or no	-	-	-	-	-	-	-	-

Men								
	Model 1 (Unadjusted)		Model 2		Model 3		Model 4	
	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P
Hand grip strength, kg	0.95 (0.92 - 0.98)	<0.01	0.99 (0.96 - 1.02)	0.44	0.99 (0.95 - 1.02)	0.44	0.99 (0.96 - 1.02)	0.53
Walking Speed, m/sec	0.13 (0.05 - 0.32)	<0.01	0.26 (0.10 - 0.69)	<0.01	0.25 (0.09 - 0.69)	<0.01	0.27 (0.10 - 0.75)	0.01
Skeletal muscle index, kg/m ²	0.68 (0.51 - 0.89)	<0.01	0.73 (0.45 - 1.18)	0.2	0.71 (0.43 - 1.18)	0.19	0.75 (0.45 - 1.26)	0.28
Sarcopenia yes or no	1.73 (0.61 - 4.91)	0.31	0.72 (0.24 - 2.19)	0.56	0.73 (0.23 - 2.29)	0.59	0.66 (0.21 - 2.13)	0.49

BMI < 25								
	Model 1 (Unadjusted)		Model 2		Model 3		Model 4	
	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P
Hand grip strength, kg	0.97 (0.95 - 1.00)	0.07	1.01 (0.96 - 1.05)	0.83	1.01 (0.96 - 1.06)	0.84	1.02 (0.96 - 1.07)	0.57
Walking Speed, m/sec	0.07 (0.02 - 0.24)	<0.01	0.14 (0.04 - 0.52)	<0.01	0.13 (0.03 - 0.52)	<0.01	0.15 (0.04 - 0.64)	<0.01
Skeletal muscle index, kg/m ²	0.67 (0.48 - 0.95)	<0.05	0.57 (0.31 - 1.04)	0.07	0.51 (0.27 - 0.95)	<0.05	0.56 (0.29 - 1.06)	0.07
Sarcopenia yes or no	3.51 (1.12 - 11.07)	<0.05	1.64 (0.48 - 5.58)	0.43	1.91 (0.52 - 6.98)	0.33	1.77 (0.47 - 6.59)	0.4

Model 1 (Unadjusted)

Model 2 (sex, age, and BMI)

Model 3 (sex, age, BMI, duration of diabetes, hypertension, dyslipidemia, smoking, drinking, eGFR, and HbA1c)

Model 4 (sex, age, BMI, duration of diabetes, hypertension, dyslipidemia, coronary heart diseases, stroke, smoking, drinking, eGFR, HbA1c)

Age ≥ 65 years old								
	Model 1 (Unadjusted)		Model 2		Model 3		Model 4	
	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P
Hand grip strength, kg	0.97 (0.95 - 0.99)	<0.01	1.00 (0.96 - 1.03)	0.83	1.00 (0.96 - 1.04)	0.91	0.98 (0.93 - 1.03)	0.46
Walking Speed, m/sec	0.15 (0.07 - 0.36)	<0.01	0.31 (0.12 - 0.78)	<0.05	0.32 (0.12 - 0.84)	<0.05	0.32 (0.12 - 0.85)	<0.05
Skeletal muscle index, kg/m ²	0.85 (0.67 - 1.07)	0.16	0.94 (0.60 - 1.47)	0.77	0.98 (0.60 - 1.58)	0.92	0.98 (0.60 - 1.60)	0.95
Sarcopenia yes or no	2.76 (1.16 - 6.56)	<0.05	1.43 (0.56 - 3.65)	0.46	1.33 (0.51 - 3.52)	0.56	1.32 (0.50 - 3.49)	0.58

Women								
	Model 1 (Unadjusted)		Model 2		Model 3		Model 4	
	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P
Hand grip strength, kg	0.92 (0.88 - 0.97)	<0.01	0.99 (0.94 - 1.05)	0.75	0.98 (0.93 - 1.04)	0.52	0.98 (0.93 - 1.04)	0.55
Walking Speed, m/sec	0.18 (0.07 - 0.50)	<0.01	0.49 (0.15 - 1.63)	0.25	0.47 (0.13 - 1.71)	0.25	0.47 (0.13 - 1.79)	0.27
Skeletal muscle index, kg/m ²	0.63 (0.47 - 0.84)	<0.01	0.82 (0.44 - 1.52)	0.52	0.81 (0.42 - 1.59)	0.55	0.83 (0.42 - 1.63)	0.58
Sarcopenia yes or no	8.00 (2.28 - 28.04)	<0.01	3.51 (0.90 - 13.65)	0.07	4.33 (0.99 - 18.96)	0.05	4.29 (0.97 - 18.95)	0.06

BMI ≥ 25								
	Model 1 (Unadjusted)		Model 2		Model 3		Model 4	
	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P	OR(95% CI)	P
Hand grip strength, kg	0.97 (0.95 - 0.99)	<0.01	0.98 (0.95 - 1.02)	0.28	0.98 (0.94 - 1.01)	0.22	0.98 (0.94 - 1.01)	0.21
Walking Speed, m/sec	0.23 (0.10 - 0.52)	<0.01	0.55 (0.21 - 1.40)	0.21	0.56 (0.21 - 1.47)	0.24	0.56 (0.21 - 1.48)	0.24
Skeletal muscle index, kg/m ²	0.75 (0.60 - 0.95)	<0.05	0.96 (0.57 - 1.61)	0.88	0.94 (0.54 - 1.63)	0.81	0.93 (0.53 - 1.63)	0.81
Sarcopenia yes or no	3.55 (1.24 - 10.15)	<0.05	1.36 (0.43 - 4.33)	0.61	1.35 (0.41 - 4.41)	0.62	1.35 (0.40 - 4.47)	0.63