

**Supplementary Table 4.** Prediabetes progression and regression on physical function based on different cut-offs over 4 years<sup>a</sup>

Binary outcomes	No. of cases/ participants	Odds ratio and 95% confidence interval		
		Model 1	Model 2	Model 3
Development of weak grip strength <sup>b</sup>				
Prediabetes maintenance	88/453	1 (Ref)	1 (Ref)	1 (Ref)
Prediabetes progression	55/211	1.46 (0.99–2.15)	1.59 (1.07–2.38)	1.96 (1.16–3.30)
Prediabetes regression	71/335	1.12 (0.79–1.58)	1.08 (0.75–1.56)	0.84 (0.51–1.36)
Development of low walking speed <sup>c</sup>				
Prediabetes maintenance	76/308	1 (Ref)	1 (Ref)	1 (Ref)
Prediabetes progression	41/133	1.36 (0.87–2.13)	1.66 (1.02–2.69)	1.29 (0.70–2.39)
Prediabetes regression	59/235	1.02 (0.69–1.52)	0.95 (0.62–1.45)	1.18 (0.66–2.11)

Model 1: without adjustment; Model 2: adjusted for age, sex, and body mass index; Model 3: additionally adjusted for history of smoking and drinking (yes or no), taking physical exercise (yes or no), history of chronic lung disease (with or without), arthritis (with or without), and Alzheimer's disease (with or without), diastolic blood pressure, glycosylated hemoglobin, total cholesterol/high-density lipoprotein cholesterol, and C-reactive protein, and corresponding physical function (except standing balance) at baseline.

<sup>a</sup>The classifications of prediabetes, diabetes, and normoglycemia were defined based on the 2021 American Diabetes Association criteria, <sup>b</sup>Weak grip strength was defined as <32 kg for men and <20 kg for women, <sup>c</sup>Low walking speed was defined as <0.6 m/sec.