

**Supplementary Table 6.** Prediabetes progression and regression on physical function over 4 years by excluding participants developed diabetes in this time-window<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				
Prediabetes maintenance	57/475	1 (Ref)	1 (Ref)	1 (Ref)
Prediabetes regression	43/409	0.93 (0.61–1.42)	0.93 (0.60–1.45)	0.61 (0.29–1.26)
Development of low walking speed				
Prediabetes maintenance	84/160	1 (Ref)	1 (Ref)	1 (Ref)
Prediabetes regression	77/148	0.98 (0.63–1.54)	0.94 (0.59–1.48)	1.21 (0.56–2.61)
Development of poor standing balance				
Prediabetes maintenance	113/384	1 (Ref)	1 (Ref)	1 (Ref)
Prediabetes regression	77/292	0.86 (0.61–1.21)	0.87 (0.61–1.24)	1.03 (0.60–1.78)

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.