

Supplementary Table 7. Summary statistics to assess the continuous biomarker score in predicting type 2 diabetes mellitus, the Singapore Chinese Health Study

Variable	Multivariable model			
	Discrimination AUC (95% CI)	Calibration (AIC)	NRI	IDI
Total dataset				
Base model 1 ^a	0.70 (0.66–0.73)	558		
Base model 1 ^a +biomarker score ^b	0.76 (0.73–0.79) ^c	474	0.58	0.06
Base model 2 ^d	0.81 (0.78–0.83)	419		
Base model 2 ^d +biomarker score ^b	0.83 (0.81–0.86) ^c	370	0.60	0.06
Base model 3 ^e	0.85 (0.83–0.88)	338		
Base model 3 ^e +biomarker score ^b	0.86 (0.84–0.89) ^c	317	0.47	0.03
Limited to cases with baseline HbA1c <6.5% and matched controls				
Base model 1 ^a	0.70 (0.66–0.75)	280		
Base model 1 ^a +biomarker score ^b	0.75 (0.70–0.79) ^c	251	0.54	0.06
Base model 2 ^d	0.75 (0.71–0.80)	261		
Base model 2 ^d +biomarker score ^b	0.78 (0.74–0.82) ^c	241	0.56	0.05
Base model 3 ^e	0.81 (0.78–0.85)	215		
Base model 3 ^e +biomarker score ^b	0.83 (0.79–0.86) ^f	207	0.46	0.04
Limited to cases with baseline HbA1c <6.0% and matched controls				
Base model 1 ^a	0.65 (0.59–0.72)	162		
Base model 1 ^a +biomarker score ^b	0.68 (0.62–0.75)	155	0.37	0.03
Base model 2 ^d	0.71 (0.65–0.77)	158		
Base model 2 ^d +biomarker score ^b	0.73 (0.67–0.79)	152	0.39	0.03
Base model 3 ^e	0.71 (0.65–0.78)	155		
Base model 3 ^e +biomarker score ^b	0.74 (0.68–0.80)	151	0.31	0.03

AUC, area under the receiver operating characteristic curve; CI, confidence interval; AIC, Akaike information criterion; NRI, net reclassification improvement; IDI, integrated discrimination improvement; HbA1c, glycosylated hemoglobin.

^aBase model 1 included age at blood taken (continuous), smoking (never, former, and current smoker), history of hypertension (yes, no), and body mass index (continuous), ^bThe biomarker score was constructed using each biomarker (the ratio of triglycerides to high density lipoprotein cholesterol, alanine aminotransferase, ferritin, and adiponectin) as log-transformed continuous variable, and was used as categorical variables (in quartiles) in the prediction model, ^cCompared with the base model, the increment in AUC value was statistically significant ($P<0.05$),

^dBase model 2: base model 1 plus random levels of glucose and insulin (both in quartiles), ^eBase model 3: base model 1 plus levels of HbA1c and random insulin (both in quartiles), ^fCompared with the base model, the increment in AUC value was marginally significant ($P=0.07$).