

Supplementary information

Supplementary Table 1. Pairwise comparisons of baseline characteristics across cohorts

Variable	A–B (<i>P</i> ; SMD)	A–C (<i>P</i> ; SMD)	A–D (<i>P</i> ; SMD)	B–C (<i>P</i> ; SMD)	B–D (<i>P</i> ; SMD)	C–D (<i>P</i> ; SMD)
Age (years)	2.34×10^{-23} ; 0.134	0.442 ; 0.044	1.16×10^{-106} ; 0.312	0.002 ; 0.174	9.74×10^{-140} ; 0.453	8.64×10^{-6} ; 0.303
Male sex (%)	1.82×10^{-25} ; 0.123	2.09×10^{-18} ; 0.786	9.27×10^{-4} ; 0.051	4.53×10^{-11} ; 0.649	9.55×10^{-5} ; 0.072	2.09×10^{-13} ; 0.728
Systolic BP (mmHg)	4.17×10^{-16} ; 0.147	1.11×10^{-8} ; 0.301	-	0.009 ; 0.162	-	-
Diastolic BP (mmHg)	1.71×10^{-18} ; 0.123	3.94×10^{-27} ; 0.631	-	6.08×10^{-10} ; 0.513	-	-
HDL cholesterol (mmol/L)	3.64×10^{-5} ; 0.046	1.18×10^{-11} ; 0.410	-	2.10×10^{-7} ; 0.454	-	-
LDL cholesterol (mmol/L)	2.41×10^{-6} ; 0.082	0.919 ; 0.009	-	0.318 ; 0.092	-	-
HbA1c (%)	5.13×10^{-15} ; 0.162	0.918 ; 0.009	-	0.079 ; 0.181	-	-
Smoking (%)	0.161 ; 0.019	0.079 ; 0.144	-	0.048 ; 0.163	-	-

Pairwise comparisons of baseline variables across the four cohorts (A–D). Each cell reports the two-sided *P*-value and absolute standardised mean difference (|SMD|) for a given cohort pair in the format “*P*-value ; |SMD|”, with values closer to 0 indicating better balance and larger values indicating greater baseline heterogeneity. For comparisons involving cohort D, *P*-values were estimated from summary statistics using Welch’s two-sample *t*-test for continuous variables and the χ^2 test for categorical variables. Cohorts are defined as follows: A, training cohort; B, internal-validation cohort; C, External Test 1 (Sendai Open Hospital); D, External Test 2 (AlzEye 2018).

Abbreviations: SMD, standardised mean difference; BP, blood pressure; HbA1c, glycated haemoglobin; HDL, high-density lipoprotein; LDL, low-density lipoprotein.