

Supplementary: Table 3: Summary of Calibration Model Performance Measures for Externally Validated Laboratory-Based and Non-Laboratory-Based Equations

Author, Year	Equation	Sex	Calibration results	
	Populations for external validation			
			Non-laboratory-based	Laboratory-based
Schiborn C et al. 2021	EPIC-Potsdam			
	Germany-Heidelberg	Both	The CP was well-calibrated for the majority of individuals in the lower nine deciles of predicted risk, while it slightly overestimated the risk in the highest decile.	The CP was well-calibrated for the majority of individuals in the lower nine deciles of predicted risk, while it slightly overestimated the risk in the highest decile
			O: E ratio=1.05, 95%CI (0.97-1.13)	O: E ratio=1.11, 95%CI (1.03-1.20),
	D' Agostino Framingham			
	Germany - Heidelberg	Both	CP showed a substantial overestimation	CP showed a substantial overestimation
	Germany-Potsdam	Both	CP showed a substantial overestimation	CP showed a substantial overestimation
Albarqouni L et al 2019	D' Agostino Framingham			
	Australia	Female	CP showed an overestimation of the risk	CP showed an overestimation of the risk
		Male	CP showed an overestimation of the risk	CP showed an overestimation of the risk
Al-Shamsi S et al 2020	D' Agostino Framingham			
	United Arab	Female	CP showed an	CP showed an

	Emirates		overestimation of the risk	overestimation of the risk
		Male	CP showed an overestimation of the risk	CP showed an overestimation of the risk
Kariuki JK et al 2017	D' Agostino Framingham			
	USA	Female	Hosmer–Lemeshow goodness-of-fit = 14.2 (p-value = 0.11); good.	Hosmer–Lemeshow goodness-of-fit = 10.5 (p-value = 0.31); good.
		Male	Hosmer–Lemeshow goodness-of-fit = 25.8 (p-value = 0.002); poor. CP showed an overestimation of the risk in the 2nd decile.	Hosmer–Lemeshow goodness-of-fit = 21.8 (p-value = 0.01); poor. CP showed an overestimation of the risk in the 1st, 2nd, 3rd, and 4th deciles.
	INTERHEART			
Joseph P et al 2018	Africa	Both	CS = 0.75, 95%CI (0.36-1.15)	CS= 0.98, 95%CI (0.66-1.30)
	China	Both	CS= 0.81, 95%CI (0.71-0.91)	CS= 0.88, 95%CI (0.78-0.98)
	Middle East	Both	CS = 1.06, 95%CI (0.86-1.26)	CS = 1.41, 95%CI (1.18-1.63)
	North America/Europe	Both	CS = 0.77, 95%CI (0.68-0.87)	CS = 1.04 95%CI (0.93-1.15)
	South America	Both	CS = 0.87, 95%CI (0.77-0.98)	CS = 1.11, 95%CI (0.97-1.24)
	South Asia	Both	CS = 0.75, 95%CI (0.65-0.86)	CS = 1.04, 95%CI (0.95-1.13)

	Southeast Asia	Both	CS = 0.92, 95%CI (0.72-1.12)	CS = 0.99, 95%CI (0.76-1.22)
Hassannejad R et al. 2021	PARS/SPARS			
	Iran	Both	slightly overestimated the event rate	slightly overestimated the event rate
			Nam-D'Agostino $\chi^2 = 29.89$, p-value = 0.001	Nam-D'Agostino $\chi^2 = 28.57$, p-value = 0.001
Ueda, P et al. 2017	Globo-risk extension			
	Australia, Iran, Scotland	Both	not reported	not reported
WHO CVD RCWG 2019	WHO 2019			
	Australia, China, Japan, Singapore, New Zealand, Iran, Thailand, and UK	Both	not reported	not reported
Li J et al. 2021	WHO 2019			
	China	Male	Calibration $\chi^2 = 388.18$, p-value < 0.001	Calibration $\chi^2 = 321.55$, p-value < 0.001
		Women	Calibration $\chi^2 = 439.99$, p-value < 0.001	Calibration $\chi^2 = 280.69$, p-value < 0.001

RCWG, Research Chart Working Group; CP, calibration plot; CS, calibration slope, O:E, observed: expected.