Supplementary: Table 2: Cardiovascular Disease Prediction Equations, Populations, Inputs, and Outcomes

CVD Risk Equations	Study participants	Risk factors included in the models	Predicted outcomes
INTERHEART laboratory-based [1].	Participants were recruited from 252 centers across 52 countries worldwide for a case-control study, with cases and controls recruited between 1999 and 2003	Age, Apolipoprotein B: A1, smoking status, second-hand smoke, diabetes, high blood pressure, WHR, psychosocial factors (general stress, depression), dietary factor, physical activity	MI
INTERHEART non-laboratory-based [1]	Same as above	Age, smoking status, second-hand smoke, self-reported diabetes, self-reported high blood pressure, family history of heart attack, WHR, psychosocial factors (general stress, depression), dietary factors, physical activity	Same as above
PARS [2].	Irfan cohort (Iranian adults recruited in 2001 and followed for at least ten years)	Age, sex, total cholesterol, systolic blood pressure, diabetes, smoking, family history of CVD, WHR	Fatal (MI or stroke death) and non-fatal CVD (MI and stroke events)
SPARS [3]	Same as above	Age, sex, systolic blood pressure, self-reporting history of diabetes, smoking,	Same as above

		WHR	
EPIC-non-clinical [4]	EPIC-Potsdam cohort, German part, started in1998	Age, sex, waist circumference, smoking status, self-reported hypertension, self-reported diabetes, family history of CVD, and consumption of whole grain, red meat, coffee, high-energy soft drinks, and plant oil	Non-fatal (MI, and stroke), and fatal (MI, and stroke)
EPIC-Clinical [4]	Same as above	The above non-clinical inputs (age, sex, waist circumference, smoking status, self-reported hypertension, self-reported diabetes, family history of CVD, and consumption of whole grain, red meat, coffee, high-energy soft drinks, and plant oil), along with systolic and diastolic blood pressure, total cholesterol, and HDL cholesterol)	Same as above
D'Agostino Framingham non-laboratory-based [5]	US (1968 to 1987)	Age, sex, smoking, history of diabetes, systolic blood pressure, treatment for hypertension, BMI	MI, angina, coronary insufficiency, CHD, cerebrovascular event (stroke, TIA), CHF, PAD, CVD death

D'Agostino Framingham laboratory-based 2008 [5]	Same as above	Age, sex, smoking, diabetes, systolic blood pressure, treatment for hypertension, total cholesterol, HDL	Same as above
WHO 2019 laboratory-based [6].	Derived using 85 prospective cohorts	Age, smoking status, systolic blood pressure, history of diabetes, and total cholesterol	Fatal or non-fatal MI or CHD; fatal or non-fatal stroke
WHO 2019 Non-laboratory-based [6].	Same as above	Age, smoking status, systolic blood pressure, BMI	Same as above
Ueda Globo-risk extension laboratory-based [7]	Eight prospective cohorts in the USA: Atherosclerosis Risk in Communities, Cardiovascular Health Study, Framingham Heart Study (original cohort), Framingham Heart Study (offspring cohort), Honolulu Heart Program, Multiple Risk Factor Intervention Trial, Puerto Rico Heart Health Program, and	Age, sex, smoking, blood pressure, diabetes, and total cholesterol.	Fatal and non-fatal CVD (IHD, stroke, MI)

	Women's Health Initiative Clinical Trial.		
Ueda Globo-risk extension non-laboratory-based [7]	Same as above	Age, sex, smoking, blood pressure, BMI	Same as above

PARS: Persian Atherosclerotic Cardiovascular Disease Risk Stratification: SPARS: Simplified Non-Laboratory-Based PARS: EPIC: European Prospective Investigation into Cancer and Nutrition: CVD: Cardiovascular Disease: WHR: Waist-Hip Ratio: MI: Myocardial Infarction: CHD: Coronary Heart Disease: TIA: Transient Ischemic Attack: CHF: Congestive Heart Failure: PAD: Peripheral Artery Disease: IHD: Ischemic Heart Disease: BMI: Body Mass Index: HDL: High-Density Lipoprotein

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