Supporting Table 1. Characteristics of each study used to develop T2DM risk scores.

DRS	Brazil Diabetes Risk Score	Cambridge Diabetes Risk Score	Danish Diabetes Risk Score	FINDRISC Diabetes Risk Scores	Leicester Diabetes Risk Score	Rotterdam Predictive Models	U.S. Diabetes Risk Score
Study name	WHO-MONICA study – Brazil urban population	Ely and Wessex Study	Inter99 Study	Finnish Diabetes Risk Score FINDRISC	ADDITION-Leicester Population Screening Study	Rotterdam Study	NHANES Study
Country	Brazil	England	Denmark	Finland	England	The Netherlands	USA
Subject numbers	1,224	1,077	6,784	4,435	6,186	1,016	5,258
Subject age (years)	35–64	40–64	30–60	35–64	40–75	55–75	20 years or older
Follow-up (years)	5	0[1]	0[2]	0[1]	0[3]	0[4]	0[5]
Cut-off used to define high risk	Score of 18	Not specified in paper	Score of 31	Score of 11	Score of 16	PM1: Score of 11 PM2: Score of 48	Score of 5
AUC	0.77	0.80	0.80	0.72 in men; 0.73 in women	0.72	PM1: 0.68 PM2: 0.74	0.79

Abbreviations: AUC: area under the curve; PM: Predictive model

[1] Cross-sectional study

[2] Cross-sectional study; final model externally validated in separate population, ADDITION study (n=1,028).

[3] Cross-sectional study; final model externally validated in separate population (n=3,171).

[4] Cross-sectional study; final model externally validated in separate population (n=2,484).

[5] Cross-sectional study; final model externally validated in separate population, ARIC and CHS cohorts (n=19,728).

Supporting Table 2. Diagnostic statistics to discriminate T2DM comparing individual DRS components.

Variable	AUC (95% CI)[1]	Prevalence at cut-off (%)	Sensitivity	Specificity	+LR	-LR	PPV	NPV
General								
Age (years)	0.58 (0.53–0.62)	-	-	-	-	-	-	-
Age ≥50	0.50 (0.45–0.55)	99.9	100%	0.1%	1.0	0	8%	100%
Age ≥55	0.55 (0.50–0.59)	74.8	83%	26%	1.1	0.65	9%	95%
Age ≥60	0.55 (0.51–0.60)	47.7	58%	53%	1.2	0.79	10%	94%
Age ≥64	0.53 (0.48–0.58)	25.5	31%	75%	1.2	0.92	10%	93%
Age ≥70	0.51 (0.46–0.56)	1.7	3%	98%	1.5	0.99	15%	92%
Male	0.59 (0.54–0.63)	49.2	65%	52%	1.4	0.67	11%	95%
Anthropometry								
Weight (kg)	0.68 (0.64–0.72)	-	-	-	-	-	-	-
Weight (≥86.4 males; ≥72.7 females)	0.62 (0.57–0.66)	44.8	66%	57%	1.5	0.6	12%	95%
Height (m)	0.53 (0.49–0.57)	-	-	-	-	-	-	-
BMI (kg/m²)	0.71 (0.67–0.75)	-	-	-	-	-	-	-
BMI ≥25	0.60 (0.56–0.64)	77.8	96%	24%	1.3	0.17	10%	98%
BMI ≥27.5	0.65 (0.61–0.69)	56.3	83%	46%	1.5	0.37	12%	97%
BMI ≥30	0.64 (0.59–0.68)	32.4	58%	70%	1.9	0.60	14%	95%
BMI ≥35	0.59 (0.54–0.65)	9.0	26%	93%	3.7	0.80	24%	94%
Waist circumference (cm)	0.74 (0.70–0.78)	-	-	-	-	-	-	-
Waist circumference (≥94 males; ≥80 females)	0.58 (0.54–0.62)	80.2	94%	21%	1.2	0.29	10%	98%
Waist circumference (≥102 males; ≥88 females)	0.64 (0.60–0.68)	54.7	81%	48%	1.6	0.40	12%	97%
Waist circumference (≥90; males & females)	0.62 (0.58–0.66)	70.3	92%	32%	1.4	0.25	11%	98%
Waist circumference (≥100; males & females)	0.67 (0.62–0.71)	39.7	70%	63%	1.9	0.48	14%	96%
Waist circumference (≥110; males & females)	0.65 (0.60–0.70)	15.4	43%	87%	3.3	0.66	23%	95%
Biological and clinical								
Systolic BP (mmHg)	0.60 (0.55–0.64)	-	-	-	-	-	-	-
Diastolic BP (mmHg)	0.49 (0.45–0.54)	-	-	-	-	-	-	-
Prescribed BP medications	0.65 (0.60–0.69)	28.3	55%	74%	2.1	0.61	16%	95%
BP 130/85 or on prescribed BP medications[2]	0.63 (0.59–0.67)	61.5	85%	41%	1.4	0.37	11%	97%
BP 140/90 or on prescribed BP medications[3]	0.64 (0.60–0.68)	46.3	72%	56%	1.6	0.50	12%	96%
Prescribed steroids	0.51 (0.46–0.55)	2.0	3%	98%	1.5	0.99	13%	92%
Lifestyle								

Variable	AUC (95% CI)[1]	Prevalence at cut-off (%)	Sensitivity	Specificity	+LR	-LR	PPV	NPV
Low level physical activity	0.59 (0.54–0.65)	20.6	37%	81%	2.0	0.78	14%	94%
Former smoker	0.52 (0.47–0.56)	33.2	36%	67%	1.1	0.96	9%	92%
Current smoker	0.52 (0.48–0.57)	14.4	19%	86%	1.4	0.94	10%	93%
Ever smoker	0.54 (0.49–0.59)	47.6	55%	53%	1.2	0.85	9%	93%
Fruit and vegetable (portions/day)	0.51 (0.46–0.55)	-	-	-	-	-	-	-
Daily fruit and vegetable consumption (no)	0.50 (0.45–0.55)	0.2	0%	99%	0	1.0	0%	92%
Genetics								
Family history of diabetes (any family)	0.62 (0.57–0.67)	18.9	41%	83%	2.4	0.71	17%	94%

Abbreviations: AUC: Area under the curve; 95% CI: 95% Confidence interval; BMI: Body mass index; BP: Blood pressure; +LR: Positive likelihood ratio; -LR: Negative likelihood ratio; PPV: Positive predictive value; NPV: Negative predictive value.

+LR = sensitivity/(1-specificity)

-LR = 1-sensitivity/specificity

[1]AUC as a continuous variable or at cut-off.

[2]Systolic BP $\geq$130 and/or diastolic BP $\geq$85.

[3]Systolic BP $\geq$140 and/or diastolic BP $\geq$90.