Supplemental Table S4. Incidence and Risk of Diabetes according to the Baseline HOMA-IR and HOMA-β Status (Matched Dataset of KNHANES Synthetic Dataset m1-m10 and NHIS-HEALS dataset [M1-M10])

Dataset		No.	Person-year (IRR)	Model A		Model B		Model C	
				HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
M1	HOMA-IR (low), HOMA-β (high)	6	4,159.82	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	46	8,240.46 (−3.96)	3.96 (1.69–9.27)	0.002[a]	3.95 (1.69–9.25)	0.002[a]	3.86 (1.65–9.04)	0.002[a]
	HOMA-IR (high), HOMA-β (high)	100	10,015.47 (−7.09)	7.05 (3.09–16.07)	<0.001[a]	6.82 (2.99–15.55)	<0.001[a]	5.22 (2.28–11.98)	<0.001[a]
	HOMA-IR (high), HOMA-β (low)	56	4,051.84 (−9.81)	9.78 (4.21–22.69)	<0.001[a]	9.66 (4.16–22.43)	<0.001[a]	7.71 (3.31–17.97)	<0.001[a]
M2	HOMA-IR (low), HOMA-β (high)	17	4,363.50	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	66	8,633.10 (−1.96)	1.96 (1.15–3.34)	0.013[a]	1.88 (1.10–3.20)	0.021[a]	1.94 (1.14–3.30)	0.015[a]
	HOMA-IR (high), HOMA-β (high)	66	10,647.03 (−1.59)	1.59 (0.94–2.72)	0.087	1.56 (0.91–2.65)	0.104	1.18 (0.68–2.03)	0.557[a]
	HOMA-IR (high), HOMA-β (low)	60	4,337.82 (−3.55)	3.55 (2.07–6.08)	<0.001[a]	3.28 (1.91–5.63)	<0.001[a]	2.69 (1.56–4.63)	<0.001[a]
M3	HOMA-IR (low), HOMA-β (high)	14	4,512.10	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	48	8,248.49 (−1.88)	1.88 (1.04–3.41)	0.038[a]	1.79 (0.99–3.25)	0.056	1.78 (0.98–3.23)	0.059
	HOMA-IR (high), HOMA-β (high)	88	10,063.90 (−2.82)	2.83 (1.61–4.97)	<0.001[a]	2.75 (1.57–4.84)	<0.001[a]	2.06 (1.16–3.67)	0.014[a]
	HOMA-IR (high), HOMA-β (low)	52	4,172.02 (−4.02)	4.05 (2.24–7.31)	<0.001[a]	3.81 (2.11–6.89)	<0.001[a]	3.06 (1.68–5.56)	<0.001[a]
M4	HOMA-IR (low), HOMA-β (high)	14	3,744.62	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	66	8,905.16 (−1.98)	1.98 (1.11–3.53)	0.020[a]	1.86 (1.04–3.31)	0.036[a]	1.80 (1.01–3.21)	0.046[a]
	HOMA-IR (high), HOMA-β (high)	88	10,634.62 (−2.21)	2.21 (1.26–3.89)	0.006[a]	2.09 (1.19–3.67)	0.011[a]	1.42 (0.80–2.53)	0.231
	HOMA-IR (high), HOMA-β (low)	57	3,918.03 (−3.89)	3.88 (2.16–6.96)	<0.001[a]	3.61 (2.01–6.48)	<0.001[a]	2.71 (1.50–4.91)	0.001[a]
M5	HOMA-IR (low), HOMA-β (high)	14	3,892.66	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	51	8,773.58 (−1.62)	1.61 (0.89–2.91)	0.113	1.53 (0.85–2.76)	0.160	1.53 (0.84–2.77)	0.162
	HOMA-IR (high), HOMA-β (high)	82	10,254.16 (−2.22)	2.23 (1.27–3.93)	0.006[a]	2.16 (1.23–3.81)	0.008[a]	1.60 (0.90–2.85)	0.109
	HOMA-IR (high), HOMA-β (low)	54	4,383.18 (−3.43)	3.44 (1.91–6.18)	<0.001[a]	3.20 (1.78–5.77)	<0.001[a]	2.51 (1.38–4.56)	0.002[a]
M6	HOMA-IR (low), HOMA-β (high)	10	4,066.05	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	54	8,267.69 (−2.66)	2.67 (1.36–5.24)	0.004[a]	2.50 (1.27–4.91)	0.160	2.49 (1.27–4.91)	0.008
	HOMA-IR (high), HOMA-β (high)	93	10,341.79 (−3.66)	3.65 (1.90–7.00)	<0.001[a]	3.43 (1.79–6.60)	<0.001[a]	2.92 (1.51–5.66)	<0.001[a]
	HOMA-IR (high), HOMA-β (low)	74	4,189.77 (−7.18)	7.17 (3.70–13.88)	<0.001[a]	6.71 (3.46–13.00)	<0.001[a]	5.99 (3.08–11.65)	<0.001[a]
M7	HOMA-IR (low), HOMA-β (high)	13	3,841.16	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	49	8,380.15 (−1.73)	1.73 (0.94–3.19)	0.079	1.62 (0.88–2.99)	0.123	1.62 (0.88–2.98)	0.125
	HOMA-IR (high), HOMA-β (high)	100	10,003.96 (−2.95)	2.96 (1.66–5.27)	<0.001[a]	2.79 (1.57–4.98)	<0.001[a]	1.94 (1.08–3.49)	0.028[a]
	HOMA-IR (high), HOMA-β (low)	53	4,040.03 (−3.88)	3.87 (2.11–7.10)	<0.001[a]	3.56 (1.94–6.55)	<0.001[a]	2.73 (1.48–5.04)	0.001[a]
M8	HOMA-IR (low), HOMA-β (high)	19	4,186.39	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	47	7,800.36 (−1.33)	1.33 (0.78–2.27)	0.292	1.27 (0.74–2.16)	0.385	1.23 (0.72–2.11)	0.440
	HOMA-IR (high), HOMA-β (high)	83	10,117.40 (−1.81)	1.81 (1.10–2.98)	0.020[a]	1.78 (1.08–2.93)	0.023[a]	1.35 (0.81–2.25)	0.254
	HOMA-IR (high), HOMA-β (low)	71	4,341.36 (−3.6)	3.62 (2.18–6.00)	<0.001[a]	3.38 (2.04–5.62)	<0.001[a]	2.67 (1.59–4.47)	<0.001[a]
M9	HOMA-IR (low), HOMA-β (high)	10	3,879.37	1 (Ref)	-	1 (Ref)	-	1 (Ref)	-
	HOMA-IR (low), HOMA-β (low)	53	8,406.18 (−2.45)	2.45 (1.24–4.81)	0.010[a]	2.23 (1.13–4.38)	0.021[a]	2.27 (1.15–4.47)	0.018[a]
	HOMA-IR (high), HOMA-β (high)	92	10,273.29 (−3.47)	3.47 (1.81–6.67)	<0.001[a]	3.20 (1.67–6.15)	<0.001[a]	2.72 (1.41–5.25)	0.003[a]
	HOMA-IR (high), HOMA-β (low)	68	4,135.38 (−6.38)	6.37 (3.28–12.37)	<0.001[a]	5.96 (3.06–11.58)	<0.001[a]	5.3 (2.71–10.33)	<0.001[a]

Model A: unadjusted; Model B: adjusted for age and sex; Model C: adjusted for age, sex, systolic blood pressure, body mass index, and total cholesterol. HOMA-IR, homeostasis model assessment of insulin resistance; HOMA-β, homeostasis model assessment of β-cell function; KNHANES, Korea National Health and Nutrition Examination Survey; NHIS-HEALS, National Health Insurance Service-National Health Screening Cohort; IRR, incidence risk ratio; HR, hazard ratio; CI, confidence interval.
[a]Statistical significance.