

## SUPPLEMENTAL MATERIALS

Supplementary Table 1 Different levels of log ISSI-2, log ( $\Delta$ C-peptide<sub>0-120</sub>/ $\Delta$ glucose<sub>0-120</sub>)  $\times$  Matsuda index, log Matsuda index and log HOMA-IR among different baseline HbA<sub>1c</sub> groups

HbA <sub>1c</sub>	PIR	Log ISSI-2		Log ( $\Delta$ C-peptide <sub>0-120</sub> / $\Delta$ glucose <sub>0-120</sub> ) $\times$ Matsuda index		Log Matsuda index		LogHOMA-IR	
		mean $\pm$ SD	P	mean $\pm$ SD	P	mean $\pm$ SD	P	mean $\pm$ SD	P
$\leq 9.2$	$\leq 0.68$	4.49 $\pm$ 0.47	0.0001	2.55 $\pm$ 0.90	< 0.0001	3.87 $\pm$ 0.57	0.165	-1.28 $\pm$ 0.69	0.054
	> 0.68	4.72 $\pm$ 0.43		3.05 $\pm$ 0.76		3.97 $\pm$ 0.45		-1.45 $\pm$ 0.54	
> 9.2	$\leq 0.68$	4.34 $\pm$ 0.48	0.0023	2.02 $\pm$ 0.94	< 0.0001	3.84 $\pm$ 0.51	0.001	-1.11 $\pm$ 0.58	< 0.0001
	> 0.68	4.55 $\pm$ 0.53		2.68 $\pm$ 0.85		4.06 $\pm$ 0.43		-1.43 $\pm$ 0.50	

Continuous variables were presented as mean and standard deviation (SD) and the difference between two groups was compared by *t*-test. HbA<sub>1c</sub>: glycated hemoglobin; HOMA-IR: HOMA of insulin resistance; ISSI-2: insulin secretion-sensitivity index-2; PIR: point in range.

Supplementary Table 2 Univariate Linear Regression Models for logISSI-2, log( $\Delta$  C-peptide<sub>0-120</sub>/  $\Delta$  glucose<sub>0-120</sub>)  $\times$  Matsuda index, logMatsuda index and logHOMA-IR

Univariate Linear Regression Models	LogISSI-2		Log( $\Delta$ C-peptide <sub>0-120</sub> / $\Delta$ glucose <sub>0-120</sub> ) $\times$ Matsuda index		LogMatsuda index		LogHOMA-IR	
Variables	Parameter	P	Parameter	P	Parameter	P	Parameter	P
PIR group	0.158	<0.001	0.405	< 0.001	0.079	< 0.001	-0.152	< 0.001
Age (years)	-0.004	0.048	-0.008	0.012	-0.001	0.866	-0.001	0.677
Male(%)	-0.042	0.354	-0.087	0.327	-0.082	0.074	0.031	0.572
Diabetes duration(years)	-0.120	<0.001	-0.243	< 0.001	-0.034	0.214	0.053	0.010
BMI(kg/m <sup>2</sup> )	0.015	0.016	0.028	0.021	-0.037	< 0.001	0.038	< 0.001
SBP(mmHg)	0.002	0.192	0.001	0.560	-0.003	0.008	0.003	0.071
DBP(mmHg)	0.003	0.152	0.008	0.029	-0.004	0.037	0.004	0.061
HbA <sub>1c</sub> (%)	-0.069	< 0.001	-0.187	< 0.001	-0.004	0.741	0.052	< 0.001
eGFR (mL/min)	0.001	0.066	0.003	0.016	-0.001	0.289	0.001	0.117
TG (mmol/L)	0.002	0.821	-0.006	0.739	-0.043	< 0.001	0.049	< 0.001
TC (mmol/L)	-0.053	0.003	-0.104	0.003	-0.062	0.001	0.083	< 0.001
HDL-C(mmol/L)	-0.040	0.623	-0.101	0.524	0.327	< 0.001	-0.411	< 0.001
LDL-C(mmol/L)	-0.079	< 0.001	-0.116	0.011	-0.035	0.145	0.059	0.039

P-values are from the inference using the generalized estimating equation-based sandwich SE estimates. BMI: body mass index; DBP: diastolic blood pressure; eGFR: estimated glomerular filtration rate; HbA<sub>1c</sub>: glycated hemoglobin; HDL-C: high-density lipoprotein cholesterol; HOMA-IR: HOMA of insulin resistance; ISSI-2: insulin secretion-sensitivity index-2; LDL-C: low-density lipoprotein cholesterol; PIR: point in range; SBP: systolic blood pressure; TC: total cholesterol; TG: triglyceride.

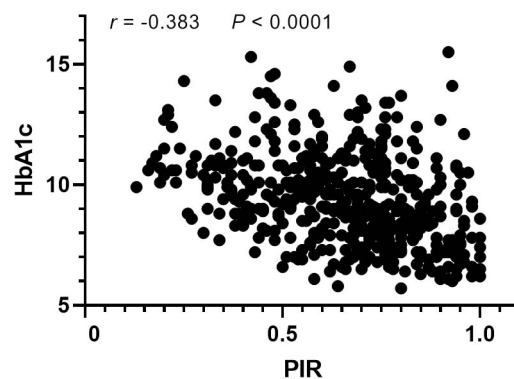


Fig. S1 The relationship of PIR and HbA<sub>1c</sub> in the participants. Spearman's correlation test was used to determine the relationship. PIR: point in range; HbA<sub>1c</sub>: glycated hemoglobin.