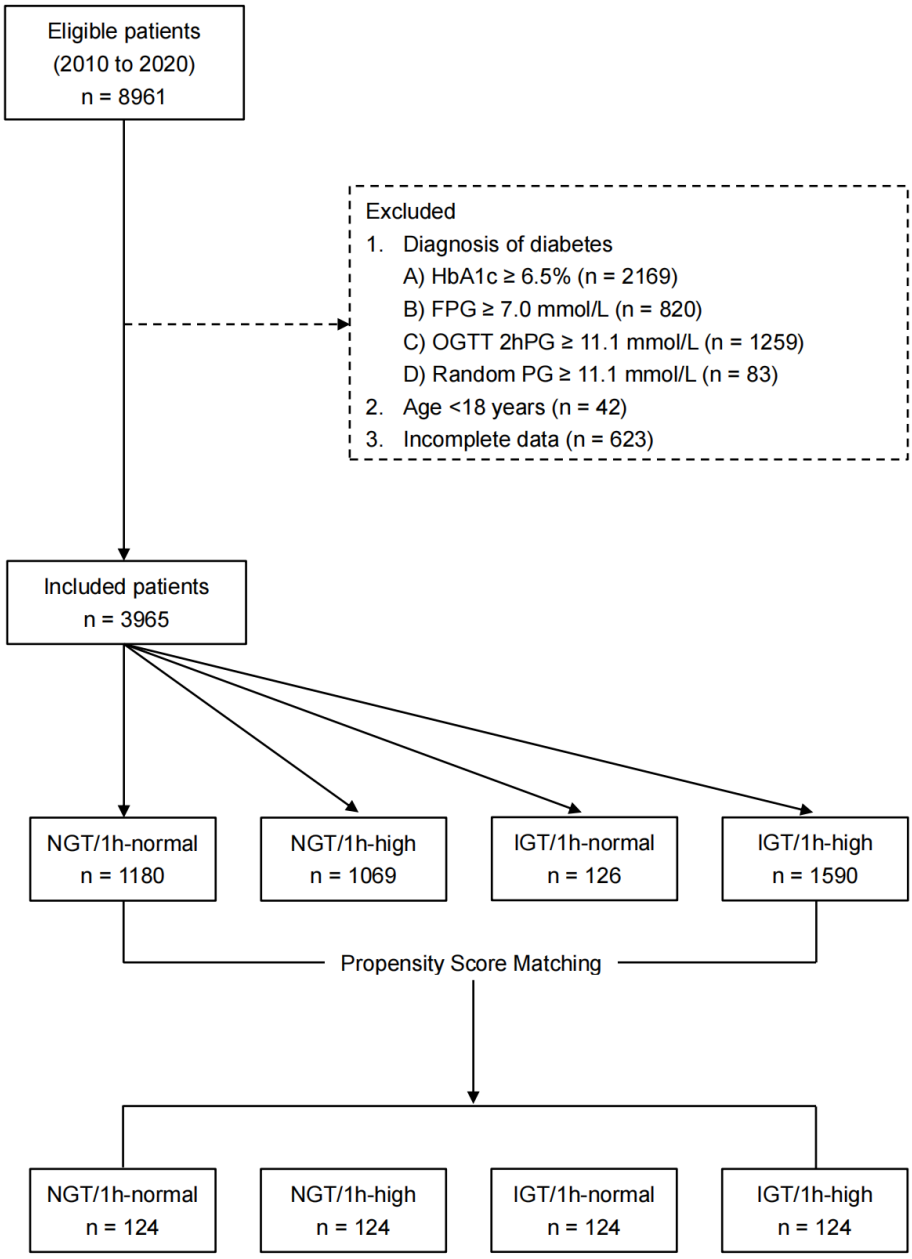
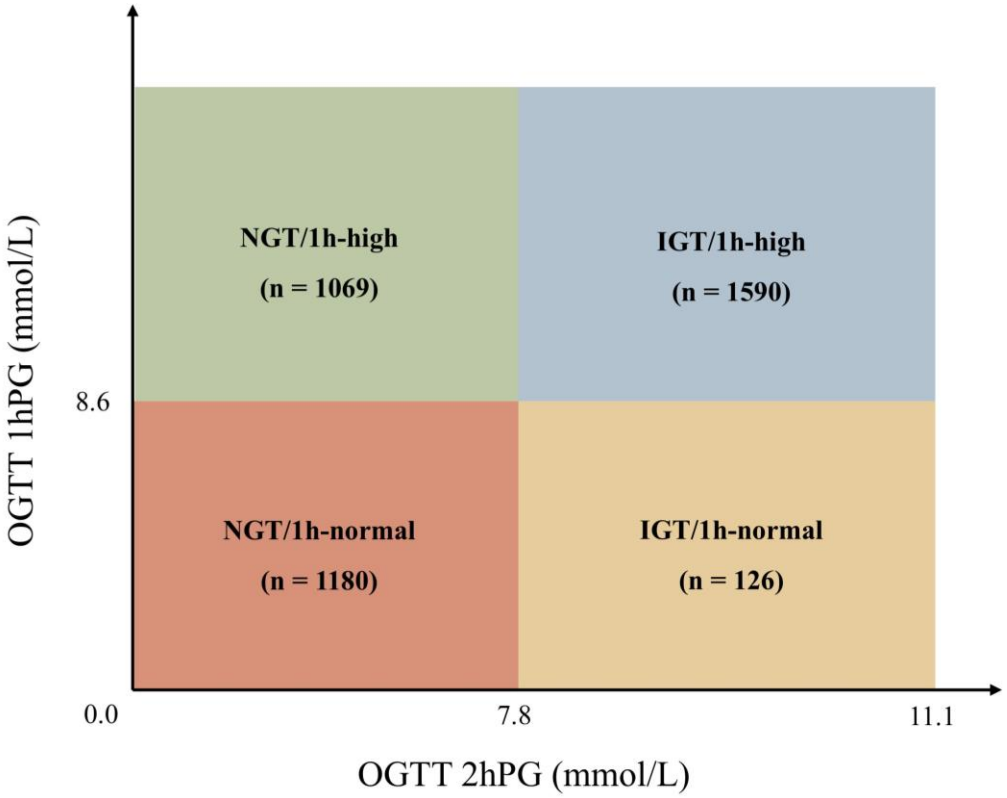
Supplemental Figure 1. Flow chart of the study



Abbreviations: IGT, impaired glucose tolerance; NGT, normal glucose tolerance; OGTT, oral glucose tolerance test.

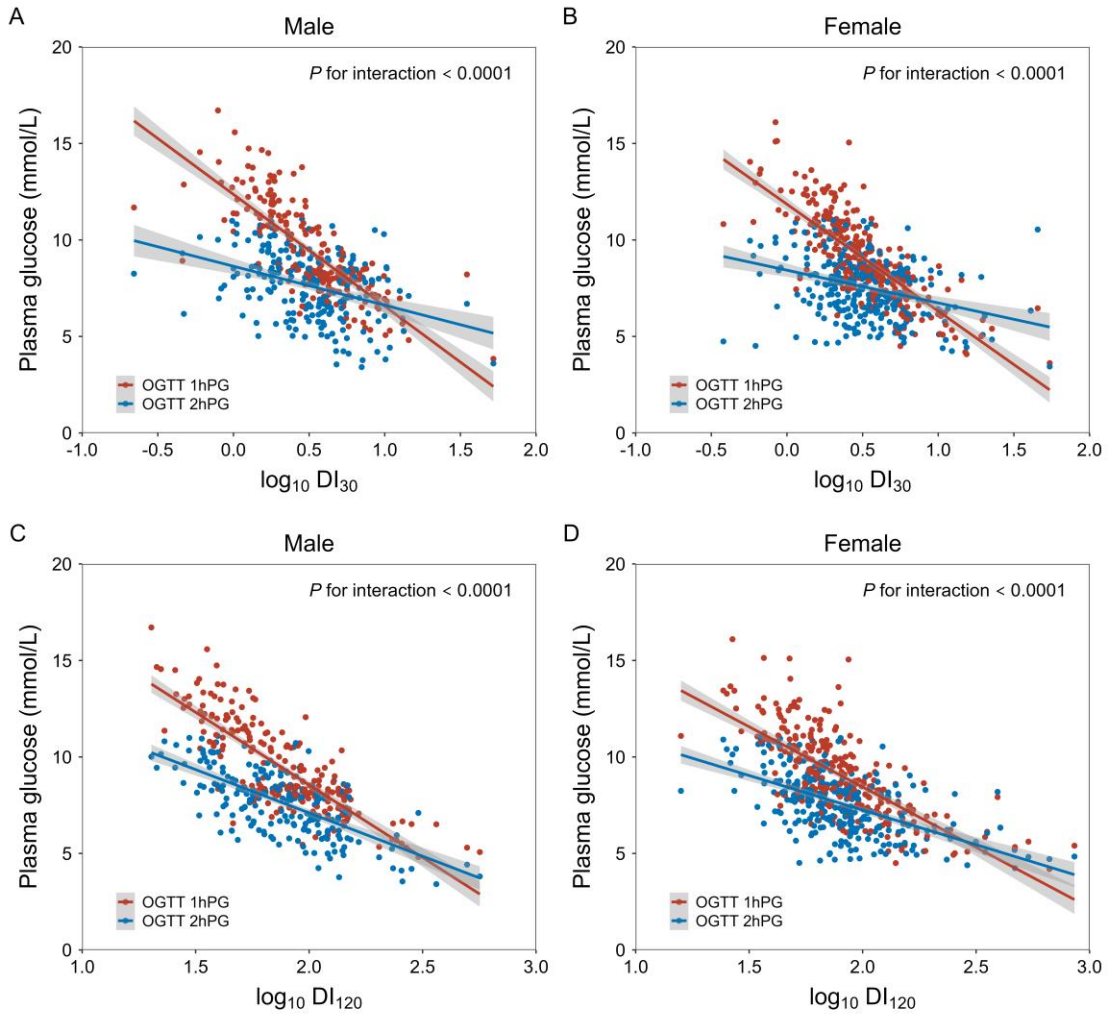
Supplemental Figure 2. Grouping diagram



Abbreviations: IGT, impaired glucose tolerance; NGT, normal glucose tolerance; OGTT, oral glucose tolerance test.

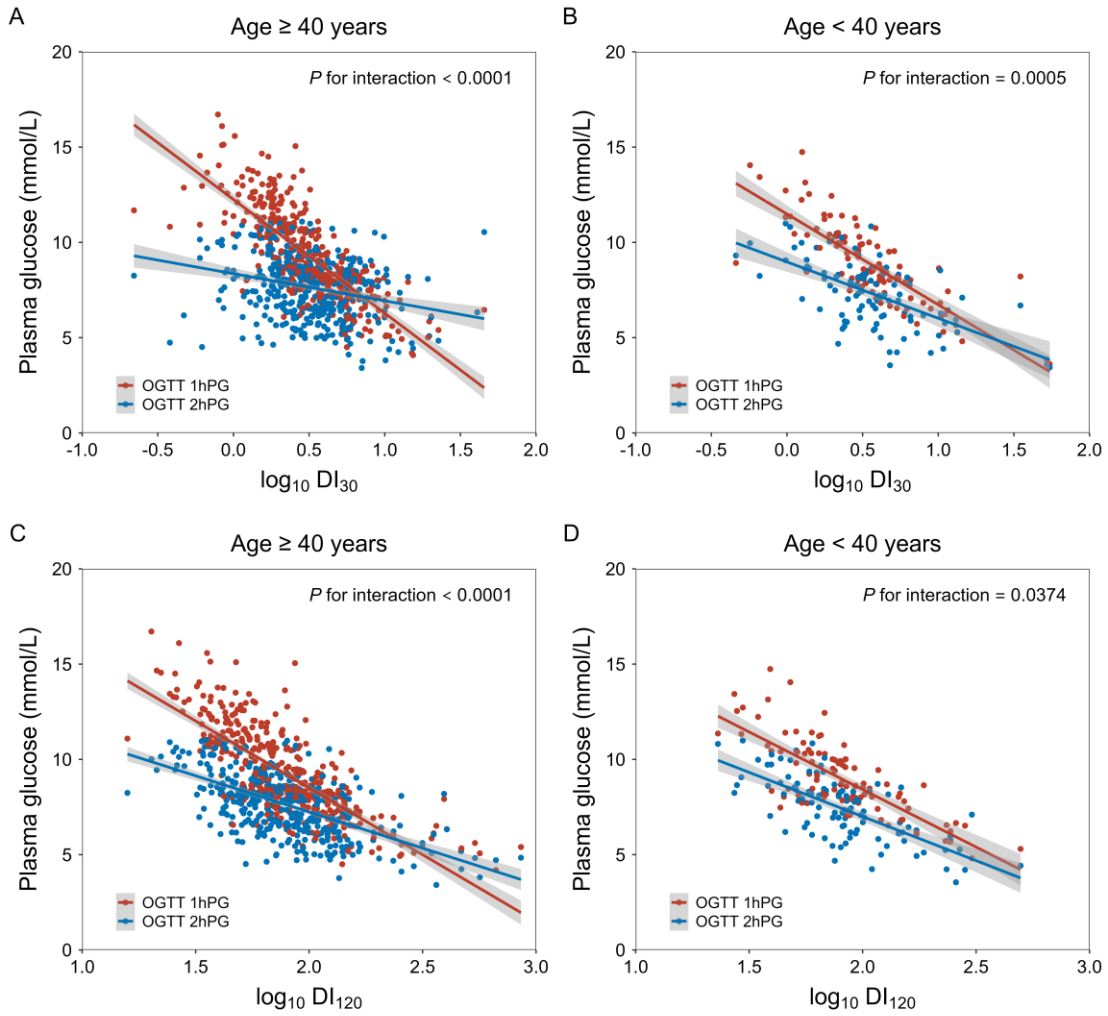
Supplemental Figure 3. Correlation of OGTT 1hPG and OGTT 2hPG with disposition index grouped by gender

Linear mixed-effects models were used to investigate the relationships between plasma glucose and disposition index, with these data log-transformed due to their skewed distributions. To compare the slopes relating the disposition index to plasma glucose between OGTT 1hPG and OGTT 2hPG, we calculated *P*-values for the interaction terms [disposition index * Time point]. Shading indicates the 95% confidence interval.



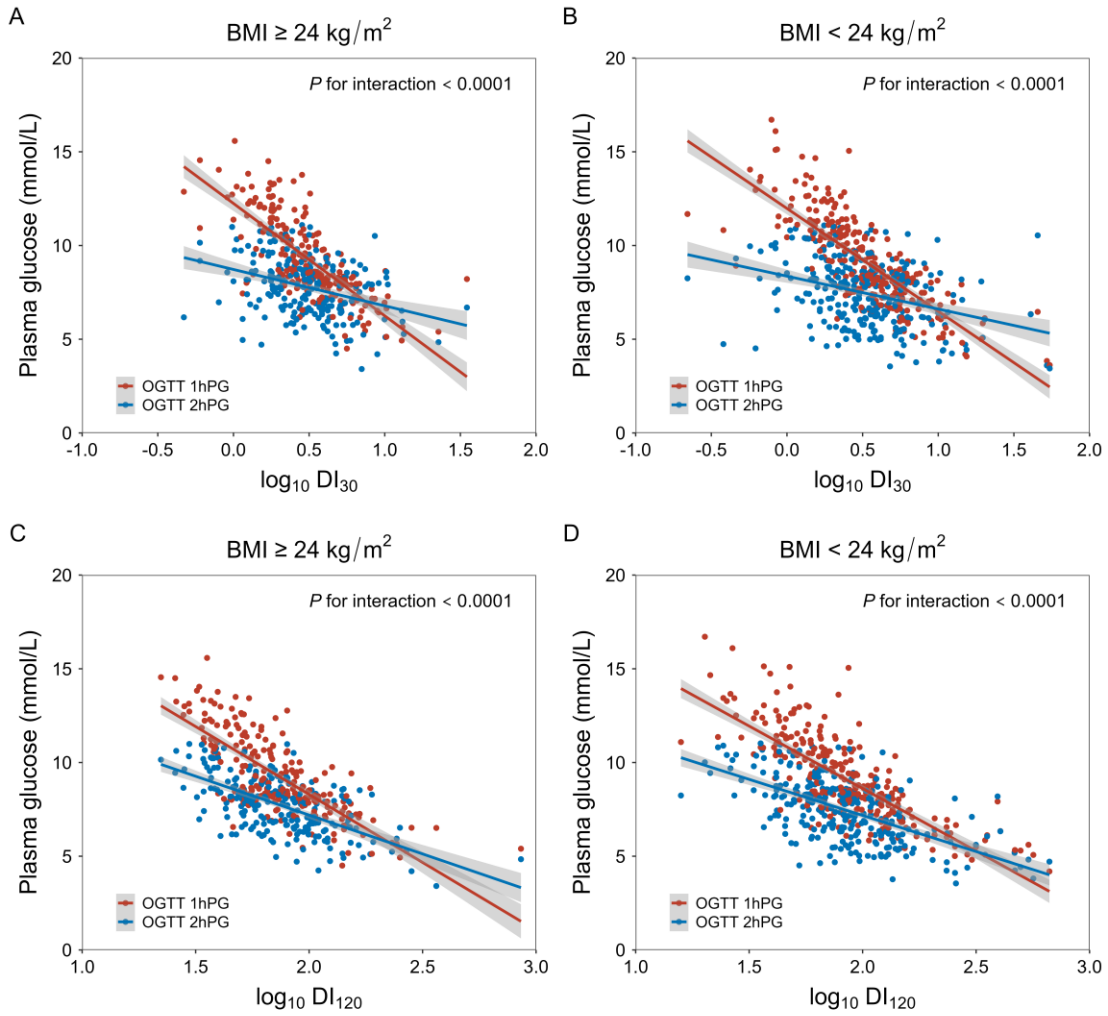
Supplemental Figure 4. Correlation of OGTT 1hPG and OGTT 2hPG with disposition index grouped by age

Linear mixed-effects models were used to investigate the relationships between plasma glucose and disposition index, with these data log-transformed due to their skewed distributions. To compare the slopes relating the disposition index to plasma glucose between OGTT 1hPG and OGTT 2hPG, we calculated *P*-values for the interaction terms [disposition index * Time point]. Shading indicates the 95% confidence interval.



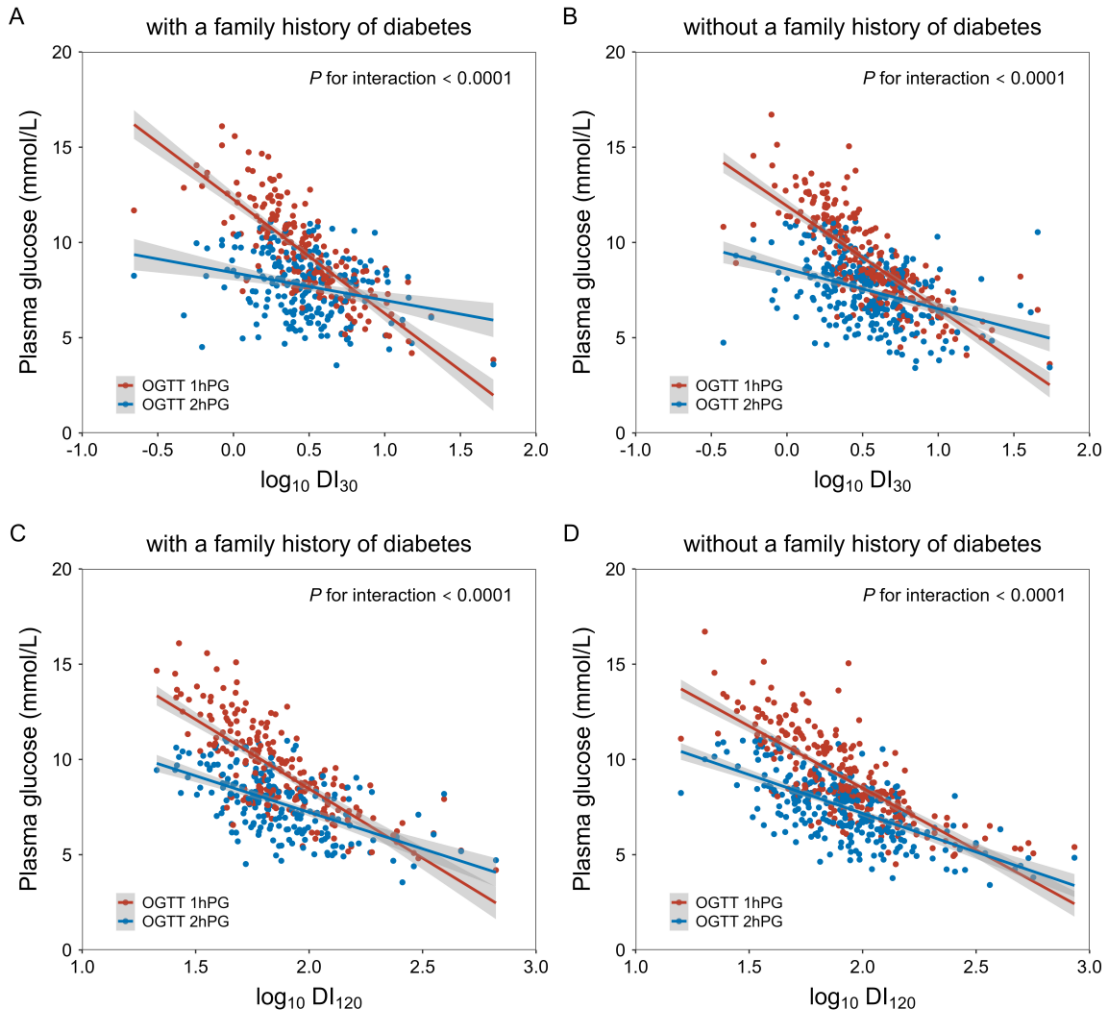
Supplemental Figure 5. Correlation of OGTT 1hPG and OGTT 2hPG with disposition index grouped by BMI

Linear mixed-effects models were used to investigate the relationships between plasma glucose and disposition index, with these data log-transformed due to their skewed distributions. To compare the slopes relating the diposition index to plasma glucose between OGTT 1hPG and OGTT 2hPG, we calculated *P*-values for the interaction terms [disposition index * Time point]. Shading indicates the 95% confidence interval.



Supplemental Figure 6. Correlation of OGTT 1hPG and OGTT 2hPG with disposition index grouped by family history of diabetes

Linear mixed-effects models were used to investigate the relationships between plasma glucose and disposition index, with these data log-transformed due to their skewed distributions. To compare the slopes relating the disposition index to plasma glucose between OGTT 1hPG and OGTT 2hPG, we calculated *P*-values for the interaction terms [disposition index * Time point]. Shading indicates the 95% confidence interval.



Supplemental table 1. Multinomial logistic regression between different groups of 1h-PG/2h-PG and clinical characterics (N = 3965)

Indices	IGT/1h-normal		IGT/1h-high		NGT/1h-normal	
	OR (95%CI)	*P* value	OR (95%CI)	*P* value	OR (95%CI)	*P* value
Sex (male vs. female)	1.09 (0.75 ~ 1.58)	0.661	0.98 (0.84 ~ 1.14)	0.764	1.71 (1.44 ~ 2.04)	<0.001
Age (continuous) [a]	1.03 (1.01 ~ 1.04)	<0.001	1.01 (1.01 ~ 1.02)	<0.001	0.98 (0.97 ~ 0.98)	<0.001
Age (<40 vs. ≥40 years) [b]	2.07 (1.29 ~ 3.31)	0.002	1.54 (1.29 ~ 1.83)	<0.001	0.55 (0.47 ~ 0.66)	<0.001
BMI (continuous) [c]	1.00 (0.96 ~ 1.05)	0.867	1.02 (1.00 ~ 1.04)	0.025	0.94 (0.92 ~ 0.96)	<0.001
BMI (< 24 vs. ≥24 kg/m^2) [d]	1.02 (0.70 ~ 1.47)	0.931	1.16 (1.00 ~ 1.36)	0.057	0.61 (0.52 ~ 0.72)	<0.001
With family history of diabetes	0.98 (0.68 ~ 1.43)	0.936	0.98 (0.84 ~ 1.15)	0.793	0.91 (0.77 ~ 1.08)	0.273

NGT/1h-high was selected as reference.

Abbreviations: BMI, body mass index; IGT, impaired glucose tolerance; NGT, normal glucose tolerance.

[a] Age as a continuous variable was included in the model. [b] Age as a categorical variable (Age < 40 and Age ≥ 40 years) was included in the model. [c] BMI as a continuous variable was included in the model. [d] BMI as a categorical variable (BMI< 24 and BMI ≥ 24 kg/m^2) was included in the model.