

Supplemental figures and tables:

Supplemental Table 1: Demographic Characteristics at first OGTT for progressors and non-progressors:

Selected characteristics by progression status				
	All	Progressors	Non-progressors	
	N=2514	N=298	N=2216	<i>p</i> -value
Age (yrs)*	12.5 (15.4)	10.5 (8.1)	12.7 (17.4)	<0.001
Interval (1st to last OGTT) - (yrs)*	2.1 (3.1)	1.7 (2.2)	2.1 (3.4)	<0.001
BMI z-score*	0.6 (1.7)	0.6 (1.6)	0.6 (1.7)	0.464
Male (%)	1236 (49.3%)	158 (53.4%)	1078 (48.8%)	0.138
White (%)	2155 (85.7%)	262 (87.9%)	1893 (85.4%)	0.290
*median (IQR), Wilcoxon rank-sum test				

Supplemental table 2: Logistic regression analyses showing odds ratios (OR) with 95% confidence interval (CI) for changes from one GRC form to another in progressors compared to non-progressors, before and after adjustments for age, sex, BMI z-score at baseline and duration between 1st and last OGTT

[illegible]

Supplemental table 3: Metabolic changes among Monophasic progressors from last to diagnostic OGTTs.

Change in metabolic measurements from last non-diabetic OGTT to diagnostic OGTT				
		Last OGTT	Diagnostic OGTT	Sign Rank
	N	Median (IQR)	Median (IQR)	<i>p</i> -value
Early C-peptide				
Monophasic to Monotonic	64	1.91(0.97)	0.99(0.72)	<0.001
Monophasic to Monophasic	61	2.67(1.42)	1.92(1.28)	<0.001
C-peptide Index				
Monophasic to Monotonic	64	0.03(0.02)	0.01(0.01)	<0.001
Monophasic to Monophasic	61	0.031(0.025)	0.021(0.018)	<0.001
Index 60				
Monophasic to Monotonic	64	1.77(1.02)	3.12(1.43)	<0.001
Monophasic to Monophasic	61	1.25(1.34)	2.30(1.39)	<0.001
C-peptide AUC/glucose AUC				
Monophasic to Monotonic	64	0.02(0.01)	0.01(0.01)	<0.001
Monophasic to Monophasic	61	0.032(0.020)	0.022(0.013)	<0.001
HOMA IR				
Monophasic to Monotonic	60	1.20(0.91)	1.61(1.16)	<0.001
Monophasic to Monophasic	58	1.88(1.77)	2.30(2.69)	<0.001

Supplemental table 4: Comparison of demographic and metabolic characteristics between ‘Others’ and those with a defined GRC shape at first OGTT.

		OGTT Curve Shape		
	All	Biphasic, Monophasic or Monotone	Other	
	N=2835	N=2514	N=321	<i>p</i> -value
Age (yrs)*	12.4 (13.6)	12.5 (15.4)	12.2 (10.1)	0.1364
Male (%)	1385 (49.0%)	1236 (49.3%)	149 (46.6%)	0.3733
White (%)	2431 (85.7%)	2155 (85.7%)	276 (86.0%)	1.0000
BMI z-score*	0.6 (1.7)	0.6 (1.7)	0.5 (1.7)	0.1926
Early C-peptide (30-0) *	3.5 (2.7)	3.5 (2.8)	3.6 (2.6)	0.5053
C-peptide index*	0.1 (0.1)	0.1 (0.1)	0.1 (0.1)	0.2072
C-peptide AUC/gluc AUC	0.042 (0.026)	0.042 (0.026)	0.042 (0.027)	0.9562
Index 60*	-0.004 (1.5)	-0.002 (1.5)	-0.014 (1.4)	0.2895
HOMA IR*	1.4 (1.4)	1.4 (1.4)	1.4 (1.4)	0.4759
*median (IQR)				

Supplemental figure 1.

