SUPPLEMENTARY DATA

Supplementary Table 1. Characteristics of African immigrants with 2h Glucose≥11.1 mmol/L
1A: African immigrants with Diabetes*
1B: African immigrants with Prediabetes*

Subj	Age (y)	Sex	BMI (kg/m^2)	A1C (%,mmol/mol)	GA (%)	Fructosamine (µmol/L)	Fasting Glucose (mmol/L)	2h Glucose (mmol/L)
Table 1A: African immigrants with Diabetes†								
1	46	M	26.6	6.9 (52)	14.87	266	6.8	13.2
2	61	M	21.1	7.3 (56)	16.87	252	6.7	13.9
3	35	M	30.5	11.3 (100)	26.58	359	10.2	17.2
4	55	F	37.4	8.4 (68)	21.04	309	10.9	21.3
Table 1B: African immigrants with Prediabetes‡§								
1	52	M	32.3	5.9 (41)	13.09	209	5.2	11.3
2	28	M	26.7	5.3 (34)	13.77	242	5.2	11.6
3	37	M	32.2	5.3 (34)	12.89	211	5.6	11.8
4	44	F	28.7	6.0 (42)	11.91	234	5.9	12.0
5	44	M	27.1	6.1 (43)	14.3	243	6.4	12.2
6	41	M	26.6	6.1 (43)	12.98	237	6.4	12.9
7	56	M	31.2	5.5 (37)	12.7	210	4.7	12.9
8	50	M	27.4	5.1 (32)	15.13	231	6.6	13.3
9	44	M	26.2	5.8 (40)	11.09	246	3.8	13.9
10	54	F	34.7	6.1 (43)	14.53	250	5.7	14.5
11	41	M	28.0	5.2 (33)	15.22	243	6.5	14.7

*Sorted by 2h Glucose
†Met at least 2 of the 3 criteria set forth by the ADA for the diagnosis of the DM
‡2h glucose≥11.1, but did meet a second criterion for DM, therefore they were classified as having pre-diabetes
§A1C, GA, fructosamine, fasting glucose, 2h glucose levels were significantly higher in 1A group than the 1B group, all P<0.05.

SUPPLEMENTARY DATA

Supplementary Table 2. Demographic and Metabolic Characteristics*

Parameter	Total n=217	West n=118 (55%)	Central n=46 (21%)	East n=53 (24%)	P-value†
Male (%)	68%	69%	70%	64%	0.77
Age (y)	39±10	40±11	38±10	37±7	0.23
BMI (kg/m^2)	27.6±4.5	27.3±4.5	28.9±5.2	27.0±3.8	0.07
WC (cm)	90±12	89±12	91±11	92±11	0.42
VAT (cm^3) (n=210)	102±76	96±74	110±77	108±79	0.44
Married (%)	45%	42%	52%	47%	0.45
Median Income ($)	$35,000	$35,000	$35,000	$45,000	0.35
Health Insurance (%)	68%	66%	72%	70%	0.76
College Graduate (%)	73%	71%	76%	74%	0.81
Fasting Glucose (mmol/L)	5.0±0.5	4.9±0.5	5.1±0.6	5.0±0.4	0.32
2h Glucose (mmol/L)	7.2±2.0	7.1±2.1	7.6±1.9	7.2±1.9	0.32
Matsuda Index	7.00±4.51	7.46±4.77	6.18±4.34	6.66±4.05	0.22
Insulinogenic Index	2.42±8.51	2.86±11.34	1.91±1.75	1.84±2.22	0.70
Oral Disposition Index	0.39±0.90	0.44±1.15	0.28±0.24	0.35±0.59	0.58
Prediabetes (%)	34% (74/217)	29% (34/118)	43% (20/46)	38% (20/53)	0.17
Hemoglobin (g/L)	141±13	141±14	140±13	140±13	0.87
Hematocrit (%)	41.9±3.5	42.2±3.7	41.7±3.1	41.7±3.2	0.60
MCV (fl)	84.5±5.6	83.8±5.8	84.0±5.1	86.3±5.0	0.02‡
Variant Hemoglobin (%)§	20% (44/217)	28% (33/118)	15% (7/46)	8% (4/53)	<0.01

* Unless noted otherwise, results available for all 218 participants and presented as mean±SD
† Comparisons were by One-way ANOVA for continuous variables and chi-square for categorical.
‡ Difference between West and East Africans significant at P=0.02
§ Forty-four of 217 had variant hemoglobin (33 with SCT, 10 with HbC Trait, 1 with HbE trait)

SUPPLEMENTARY DATA

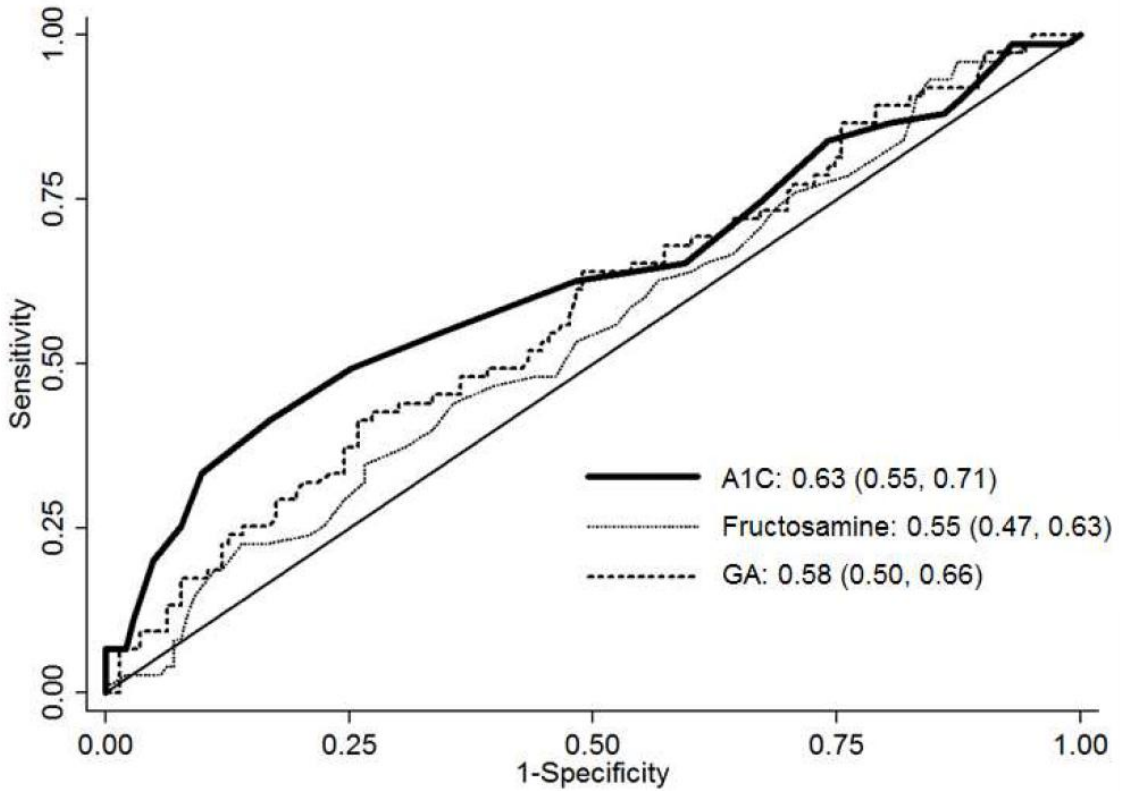
Supplementary Table 3. Comparison of Sensitivities for the diagnosis of prediabetes with n=206* and n=217

Sensitivity	n=206	n=217
A1C	49%	50%
Fructosamine	35%	41%
Glycated Albumin	41%	42%
A1C + Fructosamine	70%	72%
A1C + GA	78%	78%

***The 11 excluded from the n=206 are the individuals with isolated elevated 2h glucose >11.1 mmol/L**

SUPPLEMENTARY DATA

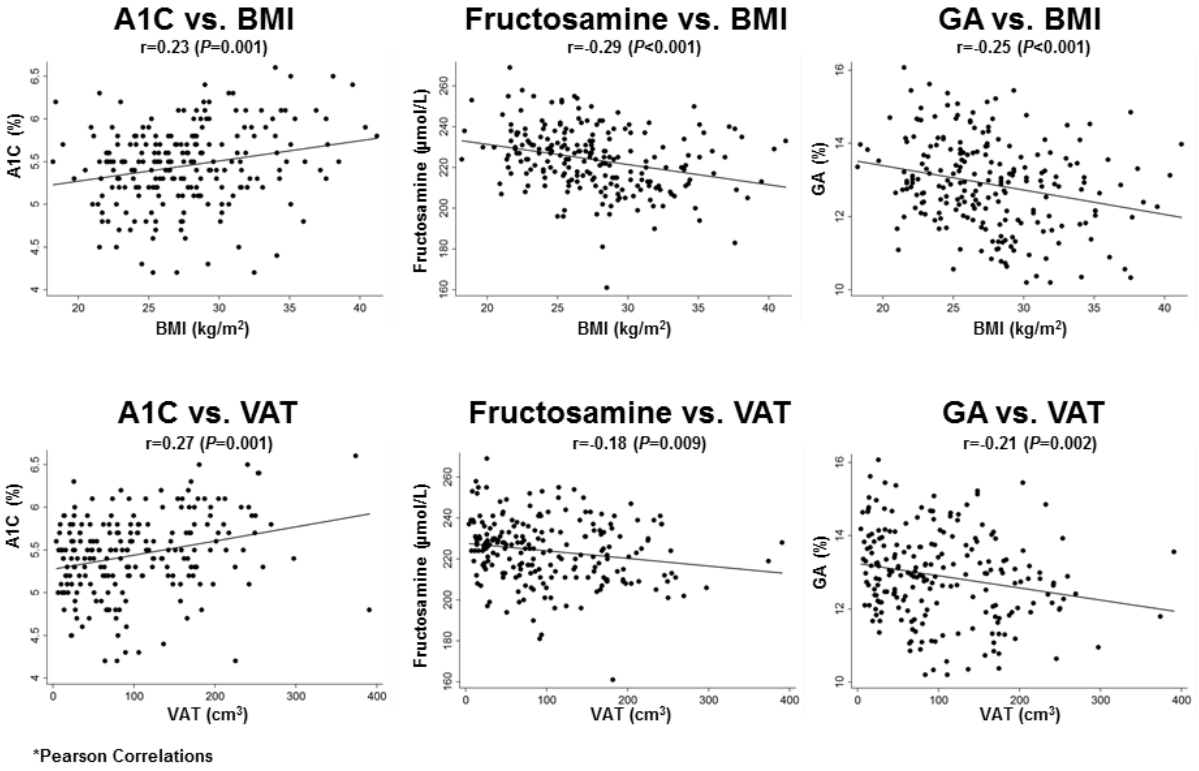
Supplementary Figure 1. AUC-ROC Curves for the Identification of Prediabetes by A1C, Fructosamine, and GA*



**P*-value for comparison of A1C, fructosamine, and GA: 0.36

SUPPLEMENTARY DATA

Supplementary Figure 2.



*Pearson Correlations