

Supplement Data Text

The blind duplicate samples were randomly selected among African American ARIC participants from Jackson MS field center at baseline examination. Characteristics of the sample is shown in following table.

Table. The characteristics of the African Americans from Jackson MS field center from ARIC study at baseline in the blind duplicate study.

Characteristics	All (N=70)	Male (N=29)	Female (N=41)
Age, year	52.2 ± 5.4	52.6 ± 5.7	52.0 ± 5.3
BMI, kg/m ²	30.5 ± 6.0	27.8 ± 3.4	32.5 ± 6.7
Prevalent heart failure (%)	4 (5.7)	1 (3.4)	3 (7.3)
Prevalent hypertension (%)	38 (54.3)	17 (58.6)	21 (51.2)
Prevalent diabetes (%)	7 (10.0)	2 (6.9)	5 (12.2)

Each pair of samples was collected at the same time and in the same manner at the baseline visit. The duplicate was given a phantom ID so that the laboratory is not aware of the identity of the duplicate pairs. Measurement of the blind duplicate provides data to estimate the sum of sampling, processing, storage and analytical variance. These baseline blind duplicate samples (70 duplicates, 140 total samples for quality control analysis) were identified by the ARIC Jackson field center, ID matches communicated to the ARIC chemistry lab, retrieved from storage, and shipped to Metabolon Inc. for metabolomic analysis. Only the pairs with detected values (without missing/below the detection limit values) in both samples were included in the analysis. Repeatability was calculated by fitting a hierarchical model using SAS's PROC MIXED.