Subclinical Atherosclerosis, Airflow Obstruction and Emphysema: the MESA Lung Study

Online Data Supplement

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Results of Quality Control (QC) Replicate Measures

Carotid Intima-Media Thickness (10% QC replicates)

Intra-class correlation coefficients (ICC) for common and internal carotid IMT were >0.98 for intrareader reproducibility and 0.87 and 0.94, respectively, for inter-reader reproducibility.

Ankle-Brachial Index (10% QC replicates)

ICCs for intra-technician and inter-technician reproducibility were 0.95 and 0.92, respectively.

Coronary Artery Calcium (100% QC replicates)

The kappa statistic for inter-scan reproducibility of CAC prevalence was 0.92. The inter-scan ICC for the Agatston score exceeded 0.99.

Spirometry (10% QC replicates)

The intra-technician ICCs for the FEV_1 and FVC were both 0.99; the corresponding inter-technician ICCs were both 0.98.

Percent Emphysema (100% QC replicates)

The inter-scan ICC for was 0.94.

All QC results suggest excellent reproducibility of these measures.

Clinical Covariates

Hypertension was defined as systolic blood pressure \geq 140 mm Hg, diastolic blood pressure \geq 90 mm Hg or currently use of anti-hypertension medication. Presence of diabetes mellitus was based on self-reported physician diagnosis, use of medication for hyperglycemia, or a fasting plasma glucose \geq 126 mg/dL (Johnson & Johnson Clinical Diagnostics, Inc., Rochester, NY). C-reactive protein and cholesterol where measured with standard methods (BNII nephelometer; High Sensitivity CRP; Dade Behring Inc., Deerfield, IL; cholesterol oxidase method, Roche Diagnostics).