

Supplementary Online Content

Shah RV, Spahillari A, Mwasongwe S, et al. Subclinical atherosclerosis, statin eligibility, and outcomes in African American individuals: the Jackson Heart Study. *JAMA Cardiol*. Published online March 18, 2017. doi:10.1001/jamacardio.2017.0944

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Baseline characteristics of JHS participants stratified by inclusion vs exclusion from the study cohort

| | Included n = 2812 | Excluded n = 2494 | p value |
|---------------------------------------|------------------------------------|------------------------------------|---------|
| Age, mean (SD), years | 55.4 ± 9.4 | 55.3 ± 15.9 | 0.88 |
| Female, N (%) | 1837 (65.3) | 1534 (61.5) | 0.004 |
| Male, N (%) | 975 (34.7) | 960 (38.5) | 0.004 |
| BMI, mean (SD), kg/m ² | 31.6 ± 7.0 | 31.9 ± 7.5 | 0.14 |
| Current smoking, N (%) | 364 (12.9) | 329 (13.5) | 0.59 |
| Hypertension, N (%) | 1486 (52.8) | 1510 (60.6) | <0.001 |
| Diabetes, N (%) | 434 (15.4) | 711 (29.3) | <0.001 |
| ASCVD History, N (%) | 0 | 572 (22.9) | <0.001 |
| Statin therapy, N (%) | 0 | 573 (27.5) | <0.001 |
| Antihypertensive therapy, N (%) | 1302 (46.3) | 1440 (58.9) | <0.001 |
| Total cholesterol, mean (SD), mg/dl | 202.4 ± 39.5 | 195.0 ± 40.6 | <0.001 |
| LDL-C, mean (SD), mg/dl | 129.6 ± 36.6 | 122.4 ± 36.2 | <0.001 |
| HDL-C, mean (SD), mg/dl | 52.3 ± 14.5 | 51.1 ± 14.8 | 0.007 |
| PCE risk score, median (IQR), % | 6.9 (3.1-13.1) | 9.2 (1.9-19.6) | <0.001 |
| Coronary artery calcium score | n = 1743 | n = 1141 | |
| Mean (SD) | 100.1 ± 308.7 | 268.4 ± 698.2 | |
| Median (IQR) | 0 (0-46.0) | 10.9 (0-186.9) | <0.001 |
| N (%) with score >0 | 732 (42.0) | 653 (57.2) | <0.001 |
| N (%) with score >100 | 310 (17.8) | 364 (31.9) | <0.001 |
| Abdominal aortic calcium score | n = 1742 | n = 1141 | |
| Mean (SD) | 637.0 ± 1271.6 | 1205.3 ± 1912.7 | |
| Median (IQR) | 55.1 (0-644.9) | 255.1 (0-1647.2) | <0.001 |
| N (%) with score >0 | 1110 (63.7) | 787 (69.0) | 0.004 |
| Incident ASCVD | 123 (4.5) ^a | 98 (4.9) | 0.57 |

Values are mean (standard deviation), median (interquartile range [IQR]) or number (%). Abbreviations: body mass index, BMI; atherosclerotic cardiovascular disease, ASCVD; high density lipoprotein cholesterol, HDL-C; low density lipoprotein cholesterol, LDL-C; number, N; pooled cohort equation, PCE; standard deviation, SD.

^aOf 2716 adjudicated events (eFigure 1).

eTable 2. Comparison of baseline characteristics by participation in CT scans

| | CT n =1743 | No CT n = 1069 | p value |
|-------------------------------------|-----------------------------|---------------------------------|----------------|
| Age, mean (SD), years | 54.9 ± 8.9 | 56.2 ± 10.1 | <0.001 |
| Female, N (%) | 1170 (67.1) | 667 (62.4) | 0.01 |
| Male, N (%) | 573 (32.9) | 402 (37.6) | 0.01 |
| BMI, mean (SD), kg/m ² | 31.4 ± 6.5 | 32.0 ± 7.9 | 0.05 |
| Current smoking, N (%) | 174 (10.0) | 190 (17.8) | <0.001 |
| Hypertension, N (%) | 875 (50.2) | 611 (57.2) | <0.001 |
| Diabetes, N (%) | 233 (13.4) | 201 (18.8) | <0.001 |
| Antihypertensive therapy, N (%) | 793 (45.5) | 509 (47.6) | 0.27 |
| Total cholesterol, mean (SD), mg/dl | 202.8 ± 39.5 | 201.7 ± 39.4 | 0.45 |
| LDL-C, mean (SD), mg/dl | 130.3 ± 36.9 | 128.4 ± 36.1 | 0.18 |
| HDL-C, mean (SD), mg/dl | 52.3 ± 14.4 | 52.2 ± 14.7 | 0.78 |
| PCE risk score, median (IQR), % | 6.2 (2.8-12.0) | 8.3 (3.6-15.3) | <0.001 |

Values are mean (standard deviation), median (interquartile range [IQR]) or number (%). P values represent comparisons between participants who underwent CT versus participants who did not undergo CT. Abbreviations: body mass index, BMI; computed tomography, CT; high density lipoprotein cholesterol, HDL-C; low density lipoprotein cholesterol, LDL-C; pooled cohort equation, PCE; standard deviation, SD.

eTable 3. Reclassification tables for coronary and abdominal aortic vascular calcification as a function of 2016 USPSTF vs 2013 ACC/AHA statin eligibility

A. CAC present vs. absent

| CAC present (non-zero CAC; N=732) | | Eligibility by USPSTF (Grade B Recommendation) | | CAC not present (CAC=0; N=1011) | | Eligibility by USPSTF (Grade B Recommendation) | |
|-----------------------------------|---------------------|--|-----------------|---------------------------------|---------------------|--|-----------------|
| | | Not statin eligible | Statin eligible | | | Not statin eligible | Statin eligible |
| Eligibility by ACC/AHA | Not statin eligible | 211 | 14 | Eligibility by ACC/AHA | Not statin eligible | 699 | 2 |
| | Statin eligible | 117 | 390 | | Statin eligible | 116 | 194 |

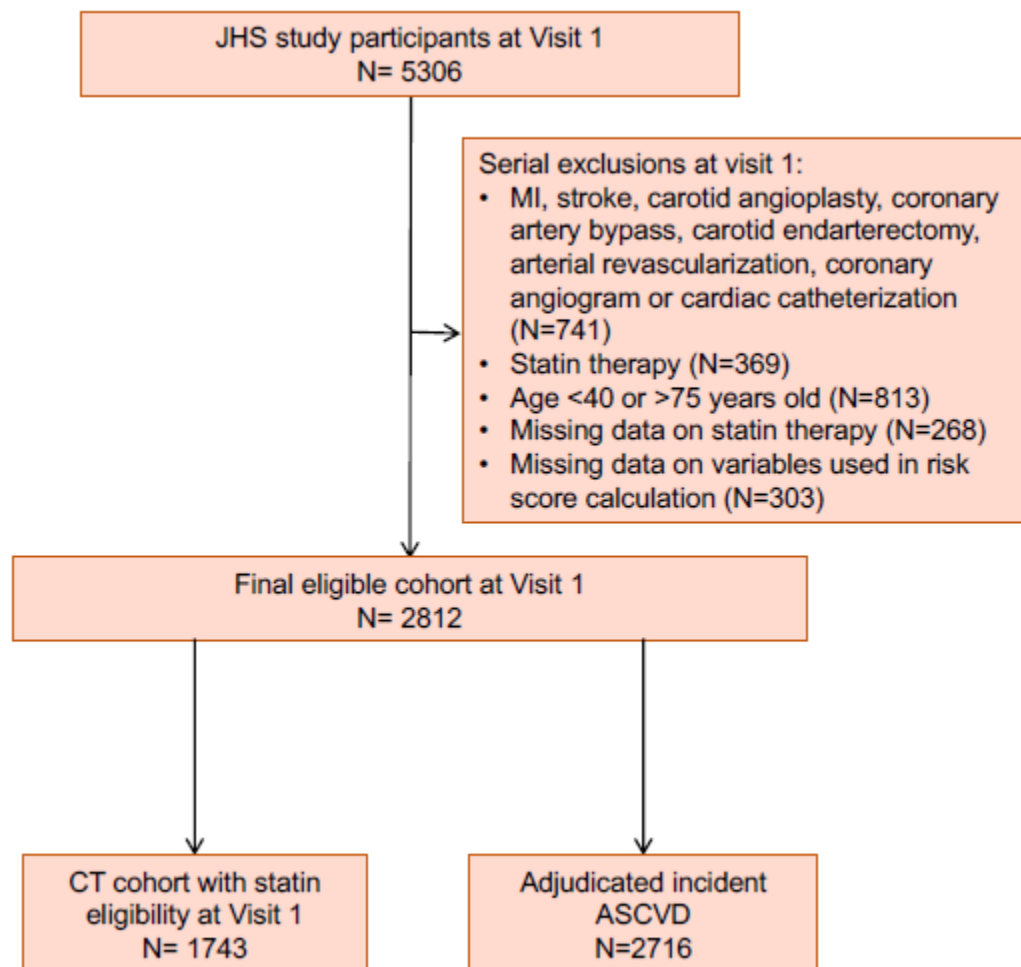
B. CAC ≥100

| CAC ≥100 (N=310) | | Eligibility by USPSTF (Grade B Recommendation) | | CAC < 100 (N=1433) | | Eligibility by USPSTF (Grade B Recommendation) | |
|------------------------|---------------------|--|-----------------|------------------------|---------------------|--|-----------------|
| | | Not statin eligible | Statin eligible | | | Not statin eligible | Statin eligible |
| Eligibility by ACC/AHA | Not statin eligible | 51 | 11 | Eligibility by ACC/AHA | Not statin eligible | 859 | 5 |
| | Statin eligible | 46 | 202 | | Statin eligible | 187 | 382 |

C. AAC present vs. absent

| AAC present (non-zero AAC; N=1110) | | Eligibility by USPSTF (Grade B Recommendation) | | AAC not present (AAC=0; N=632) | | Eligibility by USPSTF (Grade B Recommendation) | |
|------------------------------------|---------------------|--|-----------------|--------------------------------|---------------------|--|-----------------|
| | | Not statin eligible | Statin eligible | | | Not statin eligible | Statin eligible |
| Eligibility by ACC/AHA | Not statin eligible | 415 | 14 | Eligibility by ACC/AHA | Not statin eligible | 495 | 2 |
| | Statin eligible | 183 | 498 | | Statin eligible | 50 | 85 |

eFigure 1. Construction of JHS analytic cohorts used in the study



eFigure 2. Kaplan-Meier survival analysis for combined incident ASCVD

