

INTRODUCTION

African-Americans are at a greater risk of CV events. Differential race vulnerability to early subclinical atherosclerosis disease is likely; few studies have addressed this relationship.

OBJECTIVES

To study the impact of race on the presence of early subclinical atherosclerosis in adults enrolled in the FAMILIA study.

METHODS

A total of 431 adults, including caregivers and staff, recruited in the FAMILIA study from 15 Head Start preschools in Harlem (New York) and with no previous history of CV disease:

- Underwent bilateral carotid and femoral 3D vascular ultrasound.
- The 10-year Framingham CV risk was calculated.
- The relationship between race and the presence of subclinical atherosclerosis was analysed by using:
 - Multivariate logistic regression models
 - Receiver operating characteristic (ROC) curves.



Am Heart J. 2017 ;187:170-181

RESULTS

- Mean age of participants was 38.1 ± 11.1 years, 82% female, 66% Hispanic/Latino, 34% non-Hispanic Black.
- Mean 10-year Framingham CV risk was 3.8% with no significant differences by race.
- The overall prevalence of subclinical atherosclerosis was 8.8%, and was significantly higher in non-Hispanic Blacks (12.9%) than in Hispanic/Latino participants (6.7%) [Figure 1].
- Adjusted by 10-year Framingham CV risk, non-Hispanic Blacks were more likely to have subclinical atherosclerosis than Hispanic/Latino (odds ratio = 2.19; 95% CI, 0.99 to 4.85; $p = 0.05$).
- The model including 10-year Framingham CV risk and race showed good discriminatory capacity for the prediction of subclinical CV disease with an area under the ROC curve of 0.89 (95% CI, 0.85 to 0.91) [Figure 2].

Figure 1

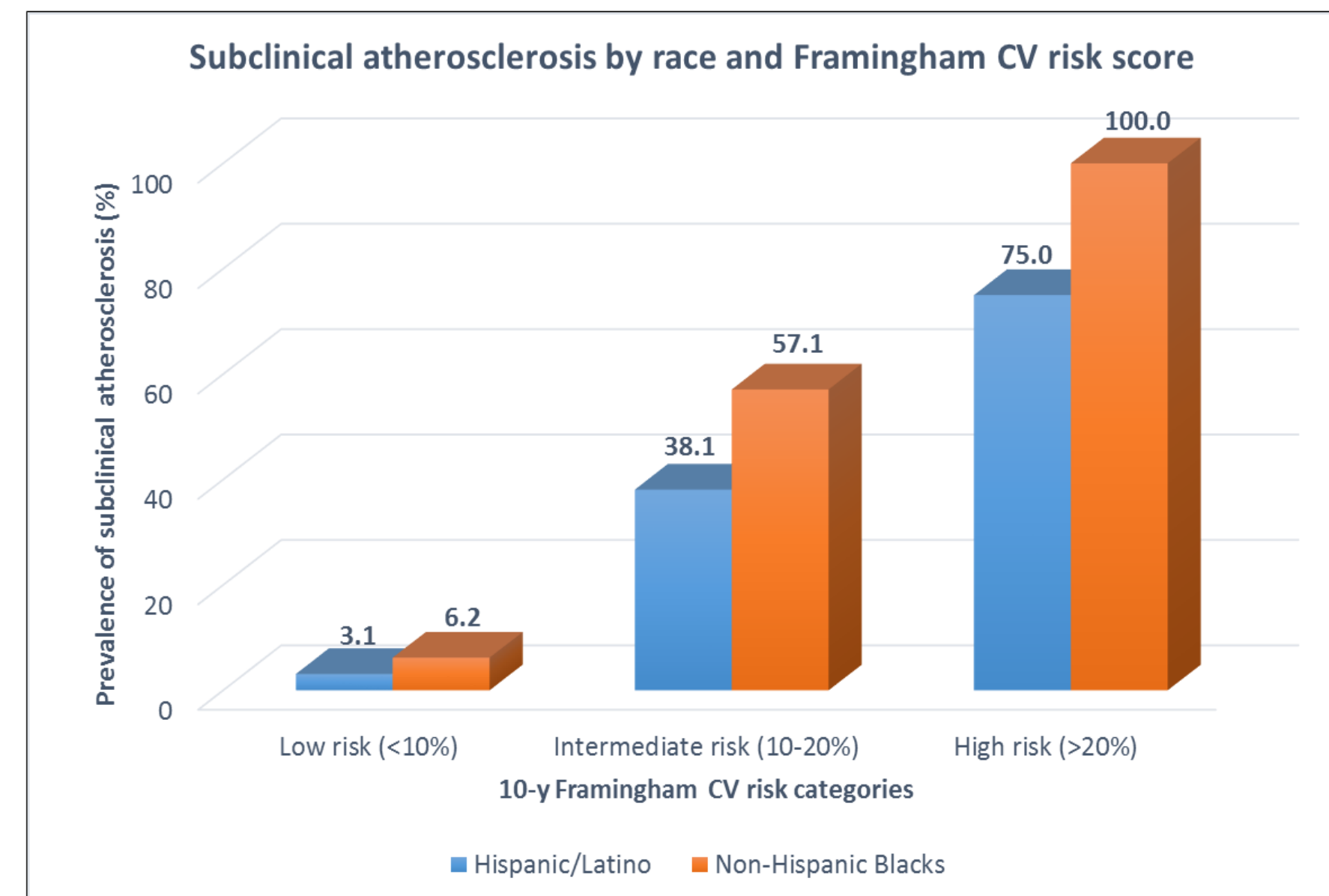
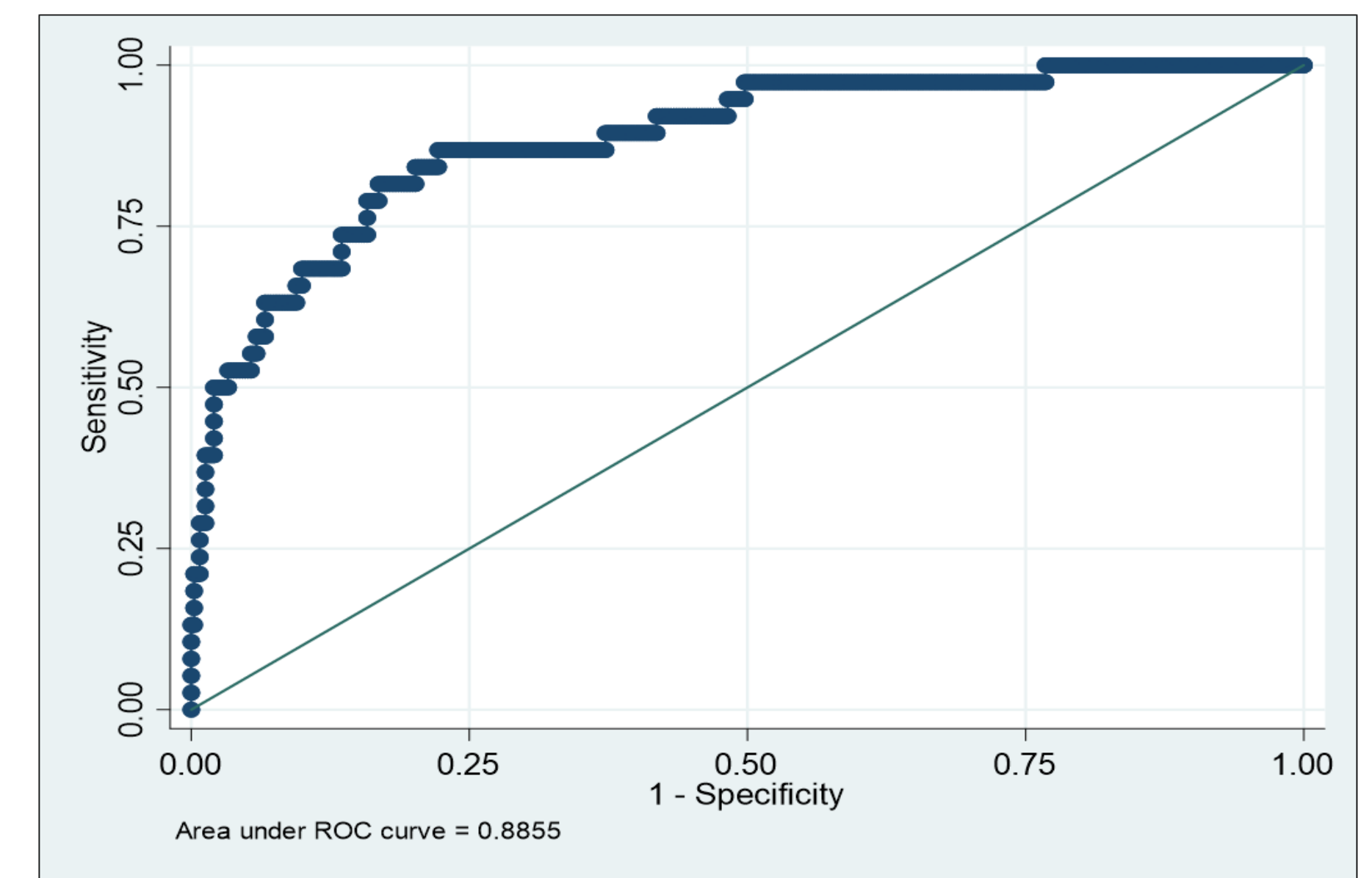


Figure 2



CONCLUSIONS

- For the same predicted CV risk, non-Hispanic Blacks seem more vulnerable to early subclinical atherosclerosis as compared to Hispanic/Latino, placing them at enhanced risk for clinical CV disease.
- These results may be important for the implementation of prevention programs in different populations.