

## Supplementary Tables

Supplementary table 1. Age-adjusted prevalence ratio for CCS  $\geq 10$  in Japanese-American men in Honolulu, US compared to Japanese men in Kusatsu, Japan (Reference group for race/ethnicity = Japanese)

| Robust Poisson<br>Regression Models        | Race/Ethnicity    | Percent<br>change in<br>PR <sup>a</sup> | Lipids and lipoproteins |
|--|-------------------|---|-------------------------|
|  | PR (95% CI)       |   | PR (95% CI)             |
| Age  | 2.30 (1.56, 3.40) | -                                       | -                       |
| Age and Standard Lipids                    |                   |   |                         |
| Age + LDL-C                                | 2.41 (1.64, 3.53) | +4.78                                   | 1.24 (1.05, 1.46)       |
| Age + HDL-C                                | 2.25 (1.52, 3.33) | -2.17                                   | 1.00 (0.84, 1.19)       |
| Age + Triglycerides                        | 2.25 (1.52, 3.32) | -2.17                                   | 1.31 (1.00, 1.72)       |
| Age and NMR-measured Lipoprotein Particles |                   |   |                         |
| <i>Age and LDL particles</i>               |                   |   |                         |
| Age + Total LDL-P                          | 2.45 (1.68, 3.59) | +6.52                                   | 1.21 (1.13, 1.31)       |
| Age + Small LDL-P                          | 2.18 (1.47, 3.21) | -5.22                                   | 1.24 (1.14, 1.34)       |
| Age + Large LDL-P                          | 2.17 (1.42, 3.32) | -5.65                                   | 0.94 (0.77, 1.15)       |
| Age + IDL-P                                | 2.35 (1.59, 3.47) | +2.17                                   | 1.16 (1.00, 1.36)       |
| Age + LDL Size                             | 2.24 (1.51, 3.32) | -2.61                                   | 0.95 (0.79, 1.13)       |
| <i>Age and HDL particles</i>               |                   |   |                         |
| Age + Total HDL-P                          | 2.25 (1.52, 3.33) | -2.17                                   | 1.14 (0.94, 1.39)       |
| Age + Small HDL-P                          | 1.86 (1.21, 2.87) | -19.13                                  | 1.31 (1.04, 1.65)       |
| Age + Med HDL-P                            | 2.32 (1.57, 3.43) | +0.87                                   | 1.05 (0.88, 1.27)       |
| Age + Large HDL-P                          | 2.06 (1.37, 3.10) | -10.43                                  | 0.82 (0.66, 1.02)       |
| Age + HDL Size                             | 2.20 (1.45, 3.32) | -4.35                                   | 0.96 (0.80, 1.15)       |
| <i>Age and VLDL particles</i>              |                   |   |                         |
| Age + Total VLDL-P                         | 2.23 (1.51, 3.30) | -3.04                                   | 1.13 (0.98, 1.31)       |
| Age + Small VLDL-P                         | 2.29 (1.55, 3.38) | -0.40                                   | 1.10 (0.95, 1.27)       |
| Age + Med VLDL-P <sup>b</sup>              | 2.20 (1.49, 3.26) | -4.35                                   | 1.22 (1.00, 1.50)       |
| Age + Large VLDL-P <sup>b</sup>            | 2.15 (1.43, 3.23) | -6.52                                   | 1.10 (0.94, 1.29)       |
| Age + VLDL Size                            | 2.27 (1.53, 3.36) | -1.30                                   | 0.98 (0.84, 1.16)       |

PR, Prevalence ratio; Each lipid or lipoprotein was modeled separately in a model adjusted for age;

<sup>a</sup> Percent change in PR for race compared to age-adjusted model,

<sup>a</sup> Percent change in PR compared to age-adjusted model was calculated as:  $[(PR \text{ for race in an age-adjusted model}) - (PR \text{ for race in a given respective model})] * 100 / [PR \text{ for race in an age-adjusted model}]$

Bold font in above table indicates major change in PR for race

<sup>b</sup> Variables Medium VLDL-P and large VLDL-P were log transformed after addition of one unit. All other continuous variables were standardized.

**Supplementary table 2. Multivariable-adjusted PR of race/ethnicity, change in PR, IDI, and NRI for CCS  $\geq$ 10 when NMR-measured lipoproteins were added to referent model**

| <b>Robust Poisson Regression Models</b> | <b>PR (95% CI)</b> | <b>% change in PR compared to model II<sup>a</sup></b> | <b>IDI (p-value)</b> | <b>NRI (p-value)</b> |
|---|--------------------|--|----------------------|----------------------|
| Model I                                 | 2.74 (1.67, 4.51)  | -  | -                    | -                    |
| Model II <sup>b</sup>                   | 2.83 (1.67, 4.78)  | -  | -                    | -                    |
| Model II-A                              | 2.42 (1.46, 4.02)  | -14.49   | 0.008 (0.18)         | 0.064 (0.15)         |
| Model II-B                              | 2.76 (1.66, 4.59)  | -2.47  | 0.000 (0.97)         | 0.015 (0.26)         |
| Model II-C                              | 2.79 (1.72, 4.55)  | +1.41  | 0.003 (0.46)         | 0.077 (0.02)         |
| Model II-D                              | 2.74 (1.66, 4.53)  | -3.18  | 0.001 (0.33)         | 0.014 (0.41)         |
| Model III-A                             | 2.50 (1.54, 4.07)  | -11.66   | 0.012 (0.07)         | 0.056 (0.24)         |
| Model III-B                             | 2.48 (1.49, 4.12)  | -12.37   | 0.014 (0.04)         | 0.071 (0.13)         |
| Model IV-A                              | 2.39 (1.44, 3.97)  | -15.55   | 0.013 (0.06)         | 0.070 (0.14)         |
| Model IV-B                              | 2.33 (1.38, 3.94)  | -17.67   | 0.016 (0.02)         | 0.111 (0.03)         |

PR, Prevalence ratio; IDI, Integrated Discrimination Improvement; NRI, Net Reclassification Improvement; Reclassification categories for NRI: <5.0%, 5.0-9.9%, 10.0-19.9%, and high  $\geq$ 20%;

Model I: race, age, BMI, pack -year of smoking, hypertension, diabetes, triglyceride, LDL-C, HDL-C

<sup>b</sup>Model II (*Referent Model*): model I + alcohol intake + CRP + fibrinogen

Model II-A: model II + large HDL-P

Model II-B: model II + HDL particle size

Model II-C: model II + VLDL particle size

Model II-D: model II + large VLDL-P

Model III-A: model II + large HDL-P + VLDL size

Model III-B: model II + large HDL-P + large VLDL-P

Model IV-A: model II + total LDL-P + large HDL-P + VLDL size

Model IV-B: model II + total LDL-P + large HDL-P + large VLDL-P

<sup>a</sup>Percent change in PR for race compared to model II was calculated as:  $[(PR \text{ for race/ethnicity in model II}) - (PR \text{ for race/ethnicity in each model (model II-A to IV-B))]*100 / [PR \text{ for race/ethnicity in model II}]$