

## Supplementary Online Content

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

**eTable 1.** Spearman Correlation Coefficients of Fasting and Nonfasting Lipids Measured on the Same Individuals

|   | Spearman correlation coefficient, (95% CI) * |
|---|--|
| Total cholesterol                                   | 0.747 (0.735, 0.758)                         |
| LDL cholesterol                                     | 0.727 (0.715, 0.739)                         |
| LDL cholesterol, excluding triglycerides >400 mg/dL | 0.737 (0.725, 0.749)                         |
| LDL cholesterol-MH                                  | 0.760 (0.749, 0.770)                         |
| HDL cholesterol                                     | 0.878 (0.872, 0.884)                         |
| Triglycerides                                       | 0.693 (0.681, 0.706)                         |
| Non-HDL cholesterol                                 | 0.781 (0.770, 0.791)                         |
| Total/HDL cholesterol ratio                         | 0.872 (0.866, 0.879)                         |

\* P<0.0001 for all correlations

Abbreviations: CI: confidence interval; LDL cholesterol: low-density lipoprotein (LDL) cholesterol calculated by the Friedewald equation; LDL cholesterol-MH indicates LDL cholesterol calculated by the Martin/Hopkins equation (manuscript reference 13); HDL cholesterol: high-density lipoprotein cholesterol.

**eTable 2.** Associations of Fasting and Nonfasting Lipids (per SD Increment) With Incident Coronary Events

|   | Standard deviation (SD) | Adjusted HR (95% CI)  | P value | Adjusted HR (95% CI)   | P value |
|---|-------------------------|---|---------|--|---------|
|   |                         | <b>All participants<br/>(N=8,270;<br/>No. coronary events =212)</b> |         | <b>Exclusively primary prevention<br/>(N=6,855;<br/>No. coronary events=170)</b> |         |
| Total cholesterol                                   |                         |   |         |  |         |
| Nonfasting  | 0.700                   | 1.18 (1.02, 1.36)   | 0.02    | 1.24 (1.06, 1.45)  | 0.009   |
| Fasting   | 0.796                   | 1.11 (0.97, 1.27)   | 0.13    | 1.16 (1.00, 1.36)  | 0.051   |
| LDL cholesterol                                     |                         |   |         |  |         |
| Nonfasting  | 0.701                   | 1.21 (1.05, 1.40)   | 0.007   | 1.28 (1.09, 1.50)  | 0.003   |
| Fasting   | 0.735                   | 1.20 (1.05, 1.38)   | 0.008   | 1.26 (1.08, 1.47)  | 0.003   |
| LDL cholesterol, excluding triglycerides >400 mg/dL |                         |   |         |  |         |
| Non-fasting   | 0.669                   | 1.21 (1.05, 1.40)   | 0.008   | 1.30 (1.10, 1.52)  | 0.002   |
| Fasting   | 0.725                   | 1.19 (1.04, 1.37)   | 0.01    | 1.25 (1.07, 1.46)  | 0.005   |
| LDL cholesterol-MH                                  |                         |   |         |  |         |
| Nonfasting  | 0.625                   | 1.23 (1.07, 1.41)   | 0.004   | 1.30 (1.11, 1.53)  | 0.001   |
| Fasting   | 0.701                   | 1.21 (1.05, 1.38)   | 0.007   | 1.27 (1.09, 1.48)  | 0.002   |
| HDL cholesterol                                     |                         |   |         |  |         |
| Nonfasting  | 0.269                   | 0.90 (0.78, 1.04) §   | 0.17    | 0.89 (0.75, 1.04) §  | 0.14    |

|                             |       |                     |       |                     |       |
|-----------------------------|-------|---------------------|-------|---------------------|-------|
| Fasting                     | 0.264 | 0.87 (0.75, 1.00) § | 0.055 | 0.85 (0.72, 1.00) § | 0.046 |
| Triglycerides               |       |                     |       |                     |       |
| Nonfasting                  | 0.501 | 1.02 (0.88, 1.17) § | 0.83  | 1.02 (0.87, 1.20) § | 0.78  |
| Fasting                     | 0.473 | 0.99 (0.86, 1.15) § | 0.94  | 1.02 (0.87, 1.19) § | 0.84  |
| Non-HDL cholesterol         |       |                     |       |                     |       |
| Nonfasting                  | 0.729 | 1.23 (1.07, 1.42)   | 0.004 | 1.30 (1.11, 1.53)   | 0.001 |
| Fasting                     | 0.806 | 1.18 (1.03, 1.35)   | 0.02  | 1.24 (1.07, 1.45)   | 0.005 |
| Total/HDL cholesterol ratio |       |                     |       |                     |       |
| Nonfasting                  | 0.277 | 1.20 (1.04, 1.38) § | 0.01  | 1.25 (1.07, 1.47) § | 0.006 |
| Fasting                     | 0.275 | 1.21 (1.05, 1.39) § | 0.009 | 1.27 (1.08, 1.48) § | 0.003 |

\* Values shown are Cox model hazard ratios (95% confidence intervals) adjusted for age, sex, race, smoking status, diabetes, randomized BP treatment (atenolol/amlodipine), randomized statin/placebo, and body-mass index.

§ log transformed

Abbreviations: CI: confidence interval; LDL cholesterol: low-density lipoprotein (LDL) cholesterol calculated by the Friedewald equation; LDL cholesterol-MH indicates LDL cholesterol calculated by the Martin/Hopkins equation (manuscript reference 13); HDL cholesterol: high-density lipoprotein cholesterol.

**eTable 3.** Associations of Fasting and Nonfasting Lipids (per mmol/L Increment) With Incident Coronary Events in Men and Women

|   | Men<br>N=6609; No. coronary events =182 |         | Women<br>N=1449; No. coronary events =30 |         | Interaction*<br>P by sex |
|---|---|---------|--|---------|--------------------------|
|   | Adjusted HR                             | P value | Adjusted HR                              | P value |                          |
| Total cholesterol                                     |   |         |  |         |                          |
| Nonfasting  | 1.34 (1.08, 1.67)                       | 0.01    | 0.86 (0.51, 1.44)                        | 0.57    | 0.13                     |
| Fasting   | 1.19 (0.99, 1.44)                       | 0.06    | 0.86 (0.55, 1.36)                        | 0.52    | 0.19                     |
| LDL cholesterol                                       |   |         |  |         |                          |
| Nonfasting  | 1.41 (1.13, 1.75)                       | 0.002   | 0.87 (0.52, 1.46)                        | 0.59    | 0.10                     |
| Fasting   | 1.37 (1.12, 1.67)                       | 0.002   | 0.86 (0.53, 1.41)                        | 0.56    | 0.09                     |
| LDL cholesterol, excluding<br>triglycerides>400 mg/dL |   |         |  |         |                          |
| Nonfasting  | 1.39 (1.11, 1.75)                       | 0.01    | 1.02 (0.58, 1.81)                        | 0.94    | 0.33                     |
| Fasting   | 1.36 (1.10, 1.66)                       | 0.004   | 0.85 (0.51, 1.42)                        | 0.53    | 0.10                     |
| LDL cholesterol-MH                                    |   |         |  |         |                          |
| Nonfasting  | 1.48 (1.16, 1.88)                       | 0.002   | 0.94 (0.53, 1.68)                        | 0.84    | 0.17                     |
| Fasting   | 1.38 (1.12, 1.70)                       | 0.002   | 0.92 (0.55, 1.53)                        | 0.75    | 0.15                     |
| HDL cholesterol §                                     |   |         |  |         |                          |
| Nonfasting  | 0.80 (0.45, 1.42)                       | 0.44    | 0.30 (0.08, 1.11)                        | 0.07    | 0.17                     |
| Fasting   | 0.65 (0.36, 1.17)                       | 0.15    | 0.33 (0.09, 1.24)                        | 0.10    | 0.35                     |
| Triglycerides §                                       |   |         |  |         |                          |
| Nonfasting  | 0.99 (0.73, 1.34)                       | 0.96    | 1.34 (0.63, 2.84)                        | 0.45    | 0.47                     |
| Fasting   | 0.94 (0.68, 1.30)                       | 0.70    | 1.40 (0.64, 3.06)                        | 0.39    | 0.35                     |
| Non-HDL cholesterol                                   |   |         |  |         |                          |
| Nonfasting  | 1.36 (1.11, 1.68)                       | 0.004   | 1.12 (0.67, 1.86)                        | 0.68    | 0.48                     |
| Fasting   | 1.27 (1.06, 1.53)                       | 0.01    | 1.01 (0.65, 1.56)                        | 0.98    | 0.33                     |
| Total/HDL cholesterol ratio §                         |   |         |  |         |                          |
| Nonfasting  | 1.82 (1.04, 3.18)                       | 0.04    | 2.48 (0.69, 8.97)                        | 0.17    | 0.66                     |
| Fasting   | 2.00 (1.14, 3.50)                       | 0.02    | 1.89 (0.54, 6.62)                        | 0.32    | 0.19                     |

Values shown are Cox model hazard ratios (95% confidence intervals) adjusted for age, race, smoking status, diabetes, randomized BP treatment (atenolol/amlodipine), randomized statin/placebo, and body-mass index.

\* Likelihood ratio test for interaction between lipids and sex in relation to coronary events.

§ log transformed

Abbreviations: LDL cholesterol: low-density lipoprotein (LDL) cholesterol calculated by the Friedewald equation; LDL cholesterol-MH indicates LDL cholesterol calculated by the Martin/Hopkins equation (manuscript reference 13).

**eTable 4.** Associations of Fasting and Nonfasting Lipids (per mmol/L Increment) With Coronary Events by Randomized Atorvastatin Therapy

|   | Placebo (N=4115; No. coronary events=125) |         |                       |         | Atorvastatin (N=4155; No. coronary events=87) |         |                       |         |
|---|---|---------|-----------------------|---------|---|---------|-----------------------|---------|
|   | Unadjusted HR (95% CI)                    | P value | Adjusted* HR (95% CI) | P value | Unadjusted HR (95% CI)                        | P value | Adjusted* HR (95% CI) | P value |
| Total cholesterol                                   |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 1.21 (0.93, 1.57)                         | 0.15    | 1.30 (1.00, 1.68)     | 0.05    | 1.13 (0.83, 1.54)                             | 0.42    | 1.22 (0.89, 1.66)     | 0.22    |
| Fasting   | 1.09 (0.88, 1.36)                         | 0.43    | 1.15 (0.92, 1.43)     | 0.21    | 1.07 (0.82, 1.39)                             | 0.63    | 1.13 (0.86, 1.47)     | 0.38    |
| LDL cholesterol                                     |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 1.37 (1.05, 1.78)                         | 0.02    | 1.42 (1.09, 1.84)     | 0.01    | 1.13 (0.84, 1.53)                             | 0.42    | 1.19 (0.88, 1.62)     | 0.27    |
| Fasting   | 1.28 (1.01, 1.63)                         | 0.04    | 1.33 (1.05, 1.69)     | 0.02    | 1.17 (0.88, 1.56)                             | 0.28    | 1.22 (0.92, 1.63)     | 0.17    |
| LDL cholesterol, excluding triglycerides >400 mg/dL |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 1.44 (1.09, 1.92)                         | 0.01    | 1.50 (1.13, 1.99)     | 0.004   | 1.07 (0.78, 1.48)                             | 0.68    | 1.14 (0.82, 1.57)     | 0.44    |
| Fasting   | 1.29 (1.00, 1.65)                         | 0.05    | 1.34 (1.04, 1.71)     | 0.02    | 1.12 (0.84, 1.51)                             | 0.44    | 1.18 (0.88, 1.59)     | 0.27    |
| LDL cholesterol-MH                                  |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 1.42 (1.06, 1.91)                         | 0.02    | 1.48 (1.10, 1.98)     | 0.009   | 1.19 (0.85, 1.68)                             | 0.31    | 1.27 (0.90, 1.79)     | 0.18    |
| Fasting   | 1.28 (0.99, 1.65)                         | 0.06    | 1.33 (1.04, 1.71)     | 0.03    | 1.21 (0.89, 1.63)                             | 0.22    | 1.27 (0.94, 1.71)     | 0.12    |
| HDL cholesterol§                                    |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 0.72 (0.37, 1.39)                         | 0.33    | 0.77 (0.39, 1.53)     | 0.45    | 0.57 (0.26, 1.26)                             | 0.17    | 0.59 (0.26, 1.31)     | 0.20    |
| Fasting   | 0.69 (0.36, 1.35)                         | 0.28    | 0.72 (0.36, 1.44)     | 0.35    | 0.43 (0.19, 0.98)                             | 0.04    | 0.43 (0.19, 0.99)     | 0.047   |
| Triglycerides§                                      |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 0.93 (0.65, 1.33)                         | 0.69    | 0.93 (0.64, 1.35)     | 0.71    | 1.16 (0.77, 1.76)                             | 0.47    | 1.18 (0.77, 1.80)     | 0.44    |
| Fasting   | 0.84 (0.58, 1.23)                         | 0.37    | 0.85 (0.57, 1.26)     | 0.41    | 1.18 (0.76, 1.83)                             | 0.46    | 1.22 (0.78, 1.92)     | 0.38    |
| Non-HDL cholesterol                                 |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 1.29 (1.00, 1.67)                         | 0.046   | 1.35 (1.05, 1.74)     | 0.02    | 1.23 (0.91, 1.64)                             | 0.18    | 1.29 (0.96, 1.74)     | 0.09    |
| Fasting   | 1.14 (0.96, 1.36)                         | 0.15    | 1.17 (0.98, 1.40)     | 0.07    | 1.15 (0.93, 1.42)                             | 0.19    | 1.19 (0.97, 1.47)     | 0.10    |
| Total/HDL cholesterol ratio§                        |   |         |                       |         |   |         |                       |         |
| Nonfasting  | 1.75 (0.91, 3.36)                         | 0.09    | 1.82 (0.93, 3.56)     | 0.08    | 1.90 (0.89, 4.04)                             | 0.10    | 2.03 (0.94, 4.40)     | 0.07    |
| Fasting   | 1.63 (0.85, 3.12)                         | 0.14    | 1.69 (0.87, 3.28)     | 0.12    | 2.28 (1.05, 4.91)                             | 0.04    | 2.49 (1.14, 5.44)     | 0.02    |

Values shown are Cox model hazard ratios (95% confidence intervals) adjusted for age, sex, race, smoking status, diabetes, randomized BP treatment (atenolol/amlodipine), and body-mass index.

§ log transformed

‡ Likelihood ratio test for interaction with randomized atorvastatin allocation, all p for interaction >0.05.

Abbreviations: LDL cholesterol: low-density lipoprotein (LDL) cholesterol calculated by the Friedewald equation; LDL cholesterol-MH indicates LDL cholesterol calculated by the Martin/Hopkins equation (manuscript reference 13).



**eTable 5.** Associations of Fasting and Nonfasting Lipids (per mmol/L Increment) With Incident Atherosclerotic Cardiovascular Disease (ASCVD) Events (351 Events)

|   | Unadjusted HR<br>(95% CI) | P value | Adjusted* HR<br>(95% CI) | P value |
|---|---------------------------|---------|--------------------------|---------|
| Total cholesterol                                     |                           |         |                          |         |
| Nonfasting  | 1.06 (0.91, 1.23)         | 0.45    | 1.11 (0.96, 1.30)        | 0.16    |
| Fasting   | 1.02 (0.90, 1.16)         | 0.76    | 1.06 (0.93, 1.21)        | 0.42    |
| LDL cholesterol                                       |                           |         |                          |         |
| Non-fasting   | 1.19 (1.02, 1.39)         | 0.03    | 1.23 (1.05, 1.43)        | 0.01    |
| Fasting   | 1.17 (1.01, 1.35)         | 0.03    | 1.19 (1.03, 1.38)        | 0.02    |
| LDL cholesterol, excluding<br>triglycerides>400 mg/dL |                           |         |                          |         |
| Nonfasting  | 1.16 (0.99, 1.37)         | 0.07    | 1.21 (1.03, 1.43)        | 0.02    |
| Fasting   | 1.14 (0.98, 1.32)         | 0.09    | 1.17 (1.01, 1.36)        | 0.04    |
| LDL cholesterol-MH                                    |                           |         |                          |         |
| Nonfasting  | 1.20 (1.01, 1.42)         | 0.04    | 1.24 (1.05, 1.48)        | 0.01    |
| Fasting   | 1.15 (0.99, 1.34)         | 0.06    | 1.19 (1.02, 1.38)        | 0.02    |
| HDL cholesterol §                                     |                           |         |                          |         |
| Nonfasting  | 0.68 (0.46, 1.01)         | 0.06    | 0.66 (0.44, 1.00)        | 0.05    |
| Fasting   | 0.65 (0.43, 0.97)         | 0.03    | 0.62 (0.40, 0.95)        | 0.03    |
| Triglycerides §                                       |                           |         |                          |         |
| Nonfasting  | 0.95 (0.77, 1.17)         | 0.62    | 0.97 (0.77, 1.21)        | 0.77    |
| Fasting   | 0.91 (0.73, 1.14)         | 0.43    | 0.94 (0.74, 1.20)        | 0.63    |
| Non-HDL cholesterol                                   |                           |         |                          |         |
| Nonfasting  | 1.13 (0.98, 1.31)         | 0.10    | 1.18 (1.02, 1.37)        | 0.03    |
| Fasting   | 1.09 (0.96, 1.24)         | 0.19    | 1.13 (0.99, 1.28)        | 0.08    |
| Total/HDL cholesterol ratio §                         |                           |         |                          |         |
| Nonfasting  | 1.55 (1.06, 2.27)         | 0.02    | 1.70 (1.14, 2.55)        | 0.01    |
| Fasting   | 1.54 (1.05, 2.27)         | 0.03    | 1.68 (1.13, 2.51)        | 0.01    |

\*Values shown are Cox model hazard ratios (95% confidence intervals) adjusted for age, sex, race, smoking status, diabetes, randomized BP treatment (atenolol/amlodipine), randomized statin/placebo, and body-mass index. § log transformed

**eTable 6.** Tenfold Cross-validated Difference in the C Indices Comparing Fasting and Nonfasting Lipids in Multivariable Models Using Bootstrapping Methodology

| Lipids  | C index    |         |                          |
|---|------------|---------|--------------------------|
|   | Nonfasting | Fasting | Mean Difference (95% CI) |
| Total cholesterol                                   | 0.6296     | 0.6267  | -0.003 (-0.013, 0.005)   |
| LDL cholesterol                                     | 0.6322     | 0.6342  | 0.002 (-0.010, 0.014)    |
| LDL cholesterol, excluding triglycerides >400 mg/dL | 0.6308     | 0.6308  | 0.000 (-0.012, 0.012)    |
| LDL cholesterol-MH                                  | 0.6348     | 0.6352  | 0.000 (-0.012, 0.012)    |
| HDL cholesterol §                                   | 0.6263     | 0.6297  | 0.004 (-0.002, 0.012)    |
| Triglycerides §                                     | 0.6225     | 0.6222  | -0.000 (-0.007, 0.006)   |
| Non-HDL cholesterol                                 | 0.6358     | 0.6336  | -.002 (-0.014, 0.008)    |
| Total/HDL cholesterol ratio §                       | 0.6331     | 0.6363  | 0.003 (-0.004, 0.012)    |

Adjusted for age, sex, race, smoking status, diabetes, systolic blood pressure (BP), randomized treatment, family history of coronary disease, and body-mass index.

§ log transformed

Abbreviations: LDL cholesterol: low-density lipoprotein (LDL) cholesterol calculated by the Friedewald equation; LDL cholesterol-MH indicates LDL cholesterol calculated by the Martin/Hopkins equation (manuscript reference 13).

**eTable 7.** Hazard Ratios (95% CIs) of Incident Coronary Events Associated With Discordant and Concordant Concentrations of Fasting and Nonfasting Lipids Based on Differences Between Nonfasting and Fasting Lipids

| Differences  | HR (95% CI)*      | P value | P (HR1 vs HR2) § |
|--|-------------------|---------|------------------|
| Total cholesterol  |                   |         |                  |
| Fasting > NF   | 1.07 (0.77, 1.49) | 0.69    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 1.11 (0.81, 1.54) | 0.51    | 0.80             |
| LDL cholesterol  |                   |         |                  |
| Fasting > NF   | 1.01 (0.72, 1.40) | 0.97    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 1.03 (0.74, 1.44) | 0.86    | 0.91             |
| LDL cholesterol, excluding triglycerides >400 mg/dL        |                   |         |                  |
| Fasting > NF   | 1.05 (0.75, 1.47) | 0.79    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 1.10 (0.78, 1.53) | 0.59    | 0.91             |
| LDL cholesterol-MH   |                   |         |                  |
| Fasting > NF1  | 0.95 (0.68, 1.33) | 0.77    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 0.94 (0.67, 1.32) | 0.71    | 0.94             |
| HDL cholesterol  |                   |         |                  |
| Fasting > NF   | 0.96 (0.69, 1.33) | 0.81    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 0.99 (0.70, 1.40) | 0.95    | 0.87             |
| Triglycerides  |                   |         |                  |
| Fasting > NF   | 1.18 (0.84, 1.67) | 0.33    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 1.12 (0.82, 1.54) | 0.48    | 0.58             |
| Non-HDL cholesterol  |                   |         |                  |
| Fasting > NF   | 0.88 (0.62, 1.24) | 0.46    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 1.00 (0.73, 1.36) | 0.99    | 0.49             |
| Total/HDL cholesterol                                      |                   |         |                  |
| Fasting > NF   | 1.03 (0.74, 1.43) | 0.85    |                  |
| Concordant (25 <sup>th</sup> -75 <sup>th</sup> percentile) | 1 [Reference]     |         |                  |
| Fasting < NF   | 1.11 (0.78, 1.56) | 0.57    | 0.85             |

\*Adjusted for age, sex, race, smoking status, diabetes, randomized BP treatment (atenolol/amlodipine), randomized statin/placebo, and body-mass index.

§ P value comparing the hazard ratios for the two discordant groups (Fasting>NF vs Fasting<NF)

Abbreviations: NF: nonfasting.

**eTable 8.** Hazard Ratios (95% CIs) of Incident Coronary Events Associated With Fasting and Nonfasting Lipids (per mmol/L Increment) Among the Discordant Groups

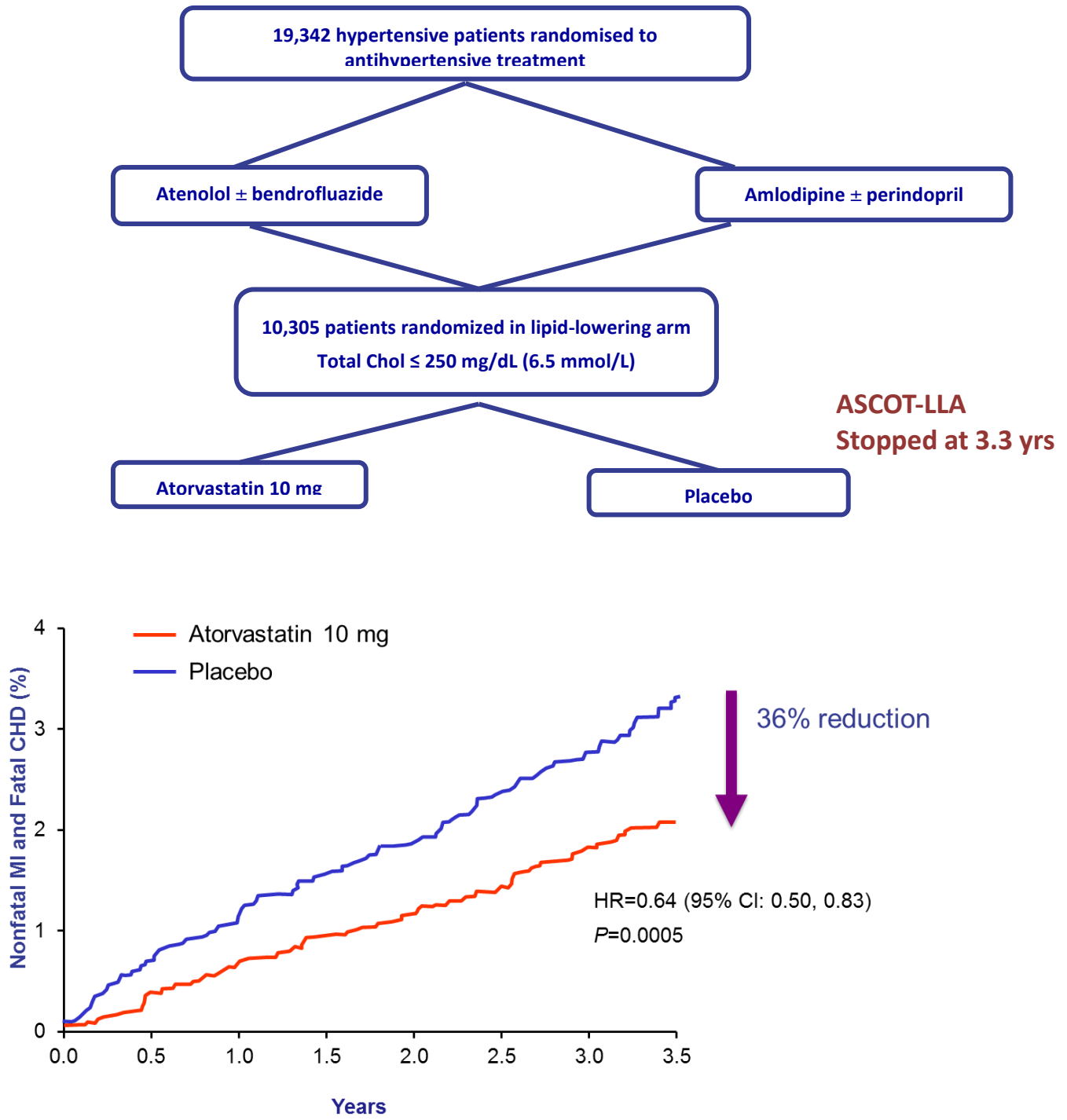
|   | Fasting           |         | Nonfasting         |         |                            |
|---|-------------------|---------|--------------------|---------|----------------------------|
|   | HR [95% CI]       | P value | HR [95% CI]        | P value | P value<br>(Fasting vs NF) |
| <b>Total Cholesterol</b>                                      |                   |         |                    |         |                            |
| Fasting>NF  | 1.42 (1.03, 1.96) | 0.03    | 1.76 (1.19, 2.59)  | 0.004   | 0.42                       |
| Fasting<NF  | 1.05 (0.73, 1.52) | 0.79    | 1.04 (0.72, 1.51)  | 0.82    | 0.98                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.22              |         | 0.06               |         |                            |
| <b>LDL cholesterol</b>  |                   |         |                    |         |                            |
| Fasting>NF  | 1.50 (1.03, 2.17) | 0.03    | 1.49 (1.01, 2.19)  | 0.04    | 0.98                       |
| Fasting<NF  | 1.34 (0.85, 2.12) | 0.21    | 1.14 (0.73, 1.80)  | 0.56    | 0.63                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.71              |         | 0.38               |         |                            |
| <b>LDL cholesterol, excluding triglycerides&gt;4.5 mmol/L</b> |                   |         |                    |         |                            |
| Fasting>NF  | 1.53 (1.04, 2.24) | 0.03    | 1.65 (1.08, 2.51)  | 0.02    | 0.79                       |
| Fasting<NF  | 1.28 (0.81, 2.02) | 0.29    | 1.07 (0.69, 1.66)  | 0.77    | 0.58                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.56              |         | 0.16               |         |                            |
| <b>LDL cholesterol-MH</b>                                     |                   |         |                    |         |                            |
| Fasting>NF  | 1.66 (1.09, 2.52) | 0.02    | 1.77 (1.10, 2.84)  | 0.02    | 0.84                       |
| Fasting<NF  | 1.38 (0.84, 2.26) | 0.21    | 1.23 (0.76, 2.01)  | 0.40    | 0.76                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.57              |         | 0.30               |         |                            |
| <b>HDL cholesterol§</b>                                       |                   |         |                    |         |                            |
| Fasting>NF  | 0.40 (0.16, 0.95) | 0.04    | 0.52 (0.23, 1.18)  | 0.12    | 0.66                       |
| Fasting<NF  | 0.69 (0.27, 1.72) | 0.42    | 0.78 (0.30, 2.06)  | 0.62    | 0.85                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.39              |         | 0.52               |         |                            |
| <b>Triglycerides§</b>   |                   |         |                    |         |                            |
| Fasting>NF  | 0.93 (0.51, 1.68) | 0.80    | 1.11 (0.61, 2.04)  | 0.74    | 0.68                       |
| Fasting<NF  | 1.04 (0.58, 1.85) | 0.91    | 0.94 (0.45, 1.95)  | 0.87    | 0.84                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.79              |         | 0.73               |         |                            |
| <b>Non-HDL cholesterol</b>                                    |                   |         |                    |         |                            |
| Fasting>NF  | 1.42 (1.01, 2.00) | 0.05    | 1.48 (1.00, 2.19)  | 0.05    | 0.88                       |
| Fasting<NF  | 1.29 (0.89, 1.85) | 0.18    | 1.21 (0.84, 1.73)  | 0.30    | 0.81                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.70              |         | 0.46               |         |                            |
| <b>Total/HDL cholesterol§</b>                                 |                   |         |                    |         |                            |
| Fasting>NF  | 0.82 (0.29, 2.32) | 0.71    | 0.84 (0.31, 2.28)  | 0.73    | 0.97                       |
| Fasting<NF  | 5.25 (1.58, 17.4) | 0.01    | 4.00 (1.14, 14.00) | 0.03    | 0.76                       |
| P (Fasting>NF vs Fasting<NF)                                  | 0.02              |         | 0.06               |         |                            |

Adjusted for age, sex, race, smoking status, diabetes, randomized BP treatment (atenolol/amlodipine), randomized statin/placebo, and body-mass index.

§ log transformed

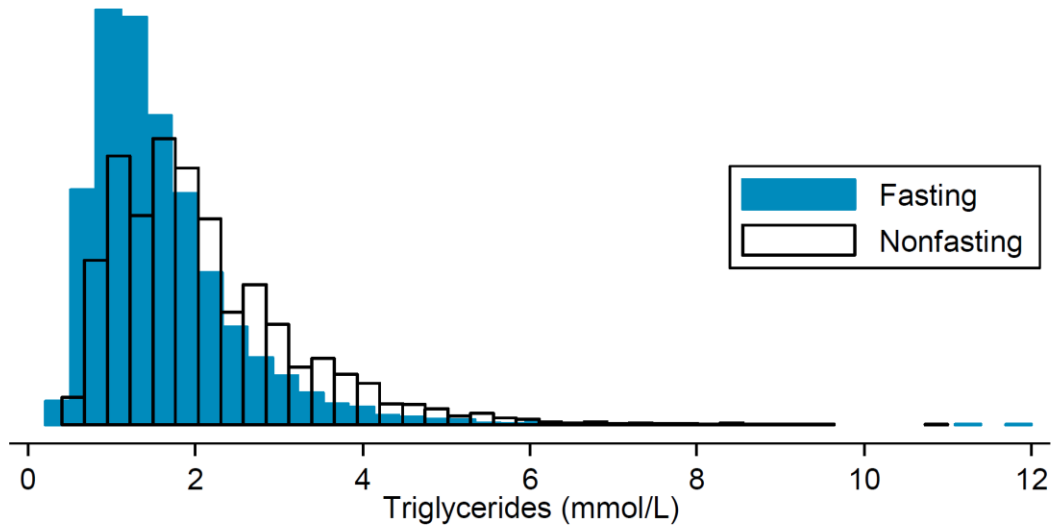
Abbreviations: NF: nonfasting.

**eFigure 1.** The ASCOT Study Design and Primary Outcome

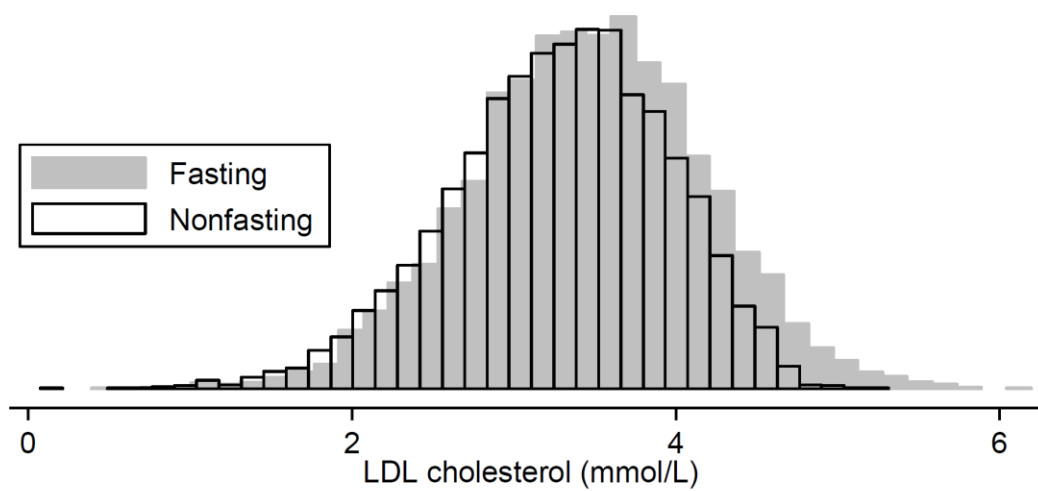


## eFigure 2. Fasting and Nonfasting Lipid Levels

A. Distributions of fasting and nonfasting triglycerides



B. Distributions of fasting and nonfasting LDL cholesterol



Panel A shows the distributions of fasting and nonfasting triglycerides. Panel B shows the distributions of fasting and nonfasting LDL cholesterol, calculated by the Friedewald equation and excluding those with triglycerides > 400 mg/dL.