Supplementary Online Content


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This supplementary material has been provided by the authors to give readers additional information about their work.
eAppendix. Cardiovascular Risk Factors and Medication Use and Main Outcome Measures

Cardiovascular Risk Factors and Medication Use
Information on medication use and smoking behavior was collected by trained interviewers using a computerized home interview. Anthropometric measures were obtained during the visit at the research center. Blood pressure was measured at the right brachial artery with a random-zero sphygmomanometer with the participant in sitting position, and the mean of 2 consecutive measurements was used. Hypertension was defined as systolic blood pressure ≥140 or diastolic blood pressure ≥90 or use of antihypertensive medication. Serum glucose and serum total and high-density lipoprotein cholesterol levels were measured with standard laboratory techniques. Diabetes mellitus was diagnosed on the basis of a fasting plasma glucose level of ≥7.0 mmol/L (≥126 mg/dL), or non-fasting plasma glucose levels of ≥11.1 mmol/L (≥200 mg/dL) in a small group of participants, or use of blood glucose lowering medication. Serum creatinine levels were measured by using an enzymatic assay (Roche Diagnostics, Mannheim, Germany), which was calibrated by isotope dilution mass spectrometry. Because creatinine measurements can vary across laboratories, we first calibrated our measures. For this purpose, mean creatinine values from the Rotterdam Study, by sex-specific age groups (<60, 60 to 69, and ≥70 years), were aligned with the corresponding corrected means from the Third National Health and Nutrition Examination Survey (NHANES-III) participants, as described previously. The NHANES-III creatinine measures were calibrated to the Cleveland Clinic Laboratory, requiring a correction factor of 0.23 mg/dL (20.3 µmol/L). The glomerular filtration rate was estimated by the abbreviated modification of diet in renal disease equation as recommended by the National Kidney Foundation. Estimated glomerular filtration rate (in mL/min per 1.73 m²) = 186 x [serum creatinine (in mg/dL)]⁻¹.¹五 x age⁻⁰.²⁶³ x 0.742 (if female)]. Chronic kidney disease was defined as estimated glomerular filtration rate of less than 60 mL/min per 1.73 m². Family history of myocardial infarction was defined as a self-reported history of myocardial infarction occurring before the age of 65 in first degree family members. Data on dispensing of statins during follow-up were obtained from all seven, fully computerized, pharmacies in the Ommoord district. We used the WHO Anatomical Therapeutic Chemical codes C10AA and C10B for statins.

Main Outcome Measures
The main outcome measures under study were incident hard atherosclerotic cardiovascular disease (ASCVD), hard coronary heart disease (CHD), and atherosclerotic CVD mortality. ASCVD composed of fatal and non-fatal myocardial infarction (MI), CHD mortality, and stroke. Incident CHD was defined as the occurrence of a non-fatal or fatal MI, or death due to CHD. Strokes were diagnosed when a patient had typical neurological symptoms and a computed tomography or magnetic resonance imaging, made within 4 weeks after the occurrence of stroke, confirmed the diagnosis. Atherosclerotic CVD mortality was defined as death due to CHD, cerebrovascular disease, or other atherosclerotic disease (including abdominal aortic aneurysms, peripheral vascular disease, and visceral vascular disease). Only first-incident events were included in the analyses. The information on study outcomes was gathered from general practitioners and from letters and discharge reports from medical specialists. Events were adjudicated by study physicians as described previously. Total number of events for each outcome and number of individuals who were lost to follow-up are presented in eTables 4-6. The overall Clark’s C of completeness of follow-up was calculated for each particular outcome (eTables 4-6).

eReferences


# Table 1. Treatment Recommendations Based on the ACC/AHA Guidelines

<table>
<thead>
<tr>
<th>Category</th>
<th>Men (N=1,894)</th>
<th>Women (N=2,315)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical CVD</strong></td>
<td>256 (13.5%)</td>
<td>141 (6.1%)</td>
</tr>
<tr>
<td>LDL-C &gt;190 mg/dL (4.9 mmol/L)</td>
<td>125 (6.6%)</td>
<td>254 (11.0%)</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>206 (10.9%)</td>
<td>217 (9.4%)</td>
</tr>
<tr>
<td>10-year ASCVD risk &gt;7.5%</td>
<td>1238 (65.4%)</td>
<td>911 (39.3%)</td>
</tr>
<tr>
<td>10-year ASCVD risk: 5%-7.5%</td>
<td>63 (3.3%)</td>
<td>330 (14.2%)</td>
</tr>
<tr>
<td>10-year ASCVD risk &lt;5%</td>
<td>6 (0.3%)</td>
<td>462 (20.0%)</td>
</tr>
</tbody>
</table>

**Abbreviations:** ACC/AHA, American College of Cardiology/American Heart Association; LDL-C, low-density lipoprotein cholesterol; ASCVD, atherosclerotic cardiovascular disease.

Values are numbers (percentages of total population) in each treatment category.

* Individuals on statin treatment at baseline (N=315 for men and N=330 for women) are excluded.

* Clinical CVD includes a history of myocardial infarction, coronary or other arterial revascularization, stroke or focal transient ischemic attack, and heart failure.

* 10-year risk for hard atherosclerotic cardiovascular disease, calculated using the Pooled Cohort Equations. 

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## eTable 2. Treatment Recommendations Based on the ATP-III Guidelines

<table>
<thead>
<tr>
<th>Hard CHD risk (%)</th>
<th>LDL-C levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;100 mg/dL</td>
</tr>
<tr>
<td></td>
<td>&lt;2.5 mmol/L</td>
</tr>
<tr>
<td><strong>Men (N=1,894)</strong></td>
<td></td>
</tr>
<tr>
<td>0-1 risk factors (10-year CHD risk &lt;10%)</td>
<td>36 (1.9%)</td>
</tr>
<tr>
<td>2+ risk factors (10-year CHD risk &lt;10%)</td>
<td>14 (0.7%)</td>
</tr>
<tr>
<td>2+ risk factors (10-year CHD risk: 10%-20%)</td>
<td>35 (1.8%)</td>
</tr>
<tr>
<td>CHD or CHD risk equivalents (10 year CHD risk &gt;20%)</td>
<td>68 (3.6%)</td>
</tr>
<tr>
<td><strong>Women (N=2,315)</strong></td>
<td></td>
</tr>
<tr>
<td>0-1 risk factors (10-year CHD risk &lt;10%)</td>
<td>77 (3.3%)</td>
</tr>
<tr>
<td>2+ risk factors (10-year CHD risk &lt;10%)</td>
<td>36 (1.6%)</td>
</tr>
<tr>
<td>2+ risk factors (10-year CHD risk: 10%-20%)</td>
<td>6 (0.3%)</td>
</tr>
<tr>
<td>CHD or CHD risk equivalents (10 year CHD risk &gt;20%)</td>
<td>22 (0.9%)</td>
</tr>
</tbody>
</table>

Abbreviations: ATP-III, Adult Treatment Panel-III; CHD, Coronary Heart Disease; LDL-C, low-density lipoprotein cholesterol.

Values are numbers (percentages of total population) in each treatment category.

Red, yellow, and green colors denote the ‘treatment recommended’, ‘treatment considered’, and ‘no treatment’ categories respectively.

a 10-year risk for hard CHD was calculated using the ATP-III risk prediction model.  

b Individuals on statin treatment at baseline (N=315 for men and N=330 for women) are excluded.

c Risk factors include: smoking, hypertension, low HDL levels (<40 mg/dL), family history of CHD, and age (men≥45, women ≥55)

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**eTable 3. Treatment Recommendations Based on the ESC Guidelines**

<table>
<thead>
<tr>
<th>Total CVD mortality risk (%)</th>
<th>LDL-C levels</th>
<th>Men (N=1,894)</th>
<th>Women (N=2,315)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;70 mg/dL &lt;1.8 mmol/L</td>
<td>70-100 mg/dL 1.8-2.5 mmol/L</td>
<td>100-155 mg/dL 2.5-4.0 mmol/L</td>
</tr>
<tr>
<td>&lt; 1%</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>1% - 5%</td>
<td>5 (0.3%)</td>
<td>38 (2.0%)</td>
<td>371 (19.6%)</td>
</tr>
<tr>
<td>5% - 10%</td>
<td>4 (0.2%)</td>
<td>24 (1.3%)</td>
<td>279 (14.7%)</td>
</tr>
<tr>
<td>&gt;= 10%</td>
<td>11 (0.6%)</td>
<td>45 (2.4%)</td>
<td>426 (22.5%)</td>
</tr>
</tbody>
</table>

Abbreviations: ESC, European Society of Cardiology; LDL-C, low-density lipoprotein cholesterol.

Values are numbers (percentages of total population) in each treatment category.

Red, yellow, and green colors denote the ‘treatment recommended’, ‘treatment considered’, and ‘no treatment’ categories respectively.

- **a** 10-year risk for cardiovascular mortality using the Systematic COronary Risk Evaluation (SCORE) equation. 14
- **b** Individuals on statin treatment at baseline (N=315 for men and N=330 for women) are excluded.
- **c** Low risk: a calculated SCORE of <1% for 10-year risk of fatal cardiovascular disease.
- **d** Moderate risk: a calculated SCORE of 1%-5% for 10-year risk of fatal cardiovascular disease.
- **e** High risk: a calculated SCORE of 5%-10% for 10-year risk of fatal cardiovascular disease.
- **f** Very high risk: presence of cardiovascular disease, diabetes, or chronic kidney disease at baseline, or a calculated SCORE of >10% for 10-year risk of fatal cardiovascular disease.
**eTable 4. Characteristics of the Study Population for Hard ASCVD Risk Estimation**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Men (N=1,513)</th>
<th>Women (N=1,920)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>65.1 (5.2)</td>
<td>65.2 (5.3)</td>
</tr>
<tr>
<td>Systolic blood pressure (mm Hg)</td>
<td>143 (21)</td>
<td>140 (21)</td>
</tr>
<tr>
<td>Diastolic blood pressure (mm Hg)</td>
<td>80 (11)</td>
<td>77 (11)</td>
</tr>
<tr>
<td>Antihypertensive treatment at baseline (N, %) c</td>
<td>267 (17.6)</td>
<td>403 (21.0)</td>
</tr>
<tr>
<td>Antihypertensive treatment during follow-up (N, %) d</td>
<td>504 (33.3)</td>
<td>624 (32.5)</td>
</tr>
<tr>
<td>Body mass index (kg/m²)</td>
<td>26.6 (3.3)</td>
<td>27.3 (4.5)</td>
</tr>
<tr>
<td>Total cholesterol (mg/dL)</td>
<td>215.4 (31.3)</td>
<td>228.2 (29.3)</td>
</tr>
<tr>
<td>HDL cholesterol (mg/dL)</td>
<td>48.3 (12.4)</td>
<td>59.5 (15.4)</td>
</tr>
<tr>
<td>LDL cholesterol (mg/dL)</td>
<td>139.4 (28.2)</td>
<td>143.6 (27.4)</td>
</tr>
<tr>
<td>Statin initiation during follow-up (N, %) f</td>
<td>263 (17.4)</td>
<td>311 (16.2)</td>
</tr>
<tr>
<td>Current smoking (N, %)</td>
<td>304 (20.1)</td>
<td>361 (18.8)</td>
</tr>
<tr>
<td>Clark’s C of completeness of 10-year follow-up e</td>
<td>96.9%</td>
<td>97.0%</td>
</tr>
<tr>
<td>Lost to follow-up during 10-year follow-up (N, %)</td>
<td>9 (0.6)</td>
<td>9 (0.5)</td>
</tr>
<tr>
<td>ASCVD events during 10-year follow-up (N, %)</td>
<td>192 (12.7)</td>
<td>151 (7.9)</td>
</tr>
</tbody>
</table>

Abbreviations: ASCVD, atherosclerotic cardiovascular disease; HDL, high-density lipoprotein; LDL, low-density lipoprotein.

a Individuals on statin treatment at baseline, persons with prevalent cardiovascular disease, and those with low density cholesterol levels >190 mg/dL are excluded from risk assessment.

b Values are mean (SD) or numbers (percentages).

c Numbers (percentage) of men and women on hypertension treatment at baseline.

d Numbers (percentage) of men and women who were not receiving antihypertensive medication at baseline and were prescribed antihypertensive over the course of follow-up.

e Numbers (percentage) of men and women on lipid lowering medication at baseline. (Statins constituted 96% of all lipid lowering medications at baseline)

f Numbers (percentage) of men and women who were not receiving lipid lowering medication at baseline and were prescribed statins over the course of follow-up.
# Table 5. Characteristics of the Study Population for Hard CHD Risk Estimation

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value a</th>
<th>Value b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men (N=1,431)</td>
<td>Women (N=1,976)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>64.9 (5.2)</td>
<td>65.1 (5.2)</td>
</tr>
<tr>
<td>Systolic blood pressure (mm Hg)</td>
<td>142 (21)</td>
<td>139 (20)</td>
</tr>
<tr>
<td>Diastolic blood pressure (mm Hg)</td>
<td>80 (11)</td>
<td>76 (10)</td>
</tr>
<tr>
<td>Antihypertensive treatment at baseline (N, %) c</td>
<td>227 (15.9)</td>
<td>373 (18.9)</td>
</tr>
<tr>
<td>Antihypertensive treatment during follow-up (N, %) d</td>
<td>474 (33.1)</td>
<td>658 (33.3)</td>
</tr>
<tr>
<td>Body mass index (kg/m²)</td>
<td>26.5 (3.2)</td>
<td>26.9 (4.3)</td>
</tr>
<tr>
<td>Total cholesterol (mg/dL)</td>
<td>222.4 (35.9)</td>
<td>236.7 (35.9)</td>
</tr>
<tr>
<td>Total cholesterol (mmol/L)</td>
<td>5.76 (0.93)</td>
<td>6.13 (0.93)</td>
</tr>
<tr>
<td>HDL cholesterol (mg/dL)</td>
<td>49.0 (12.4)</td>
<td>59.8 (15.1)</td>
</tr>
<tr>
<td>HDL cholesterol (mmol/L)</td>
<td>1.27 (0.32)</td>
<td>1.55 (0.39)</td>
</tr>
<tr>
<td>LDL cholesterol (mg/dL)</td>
<td>145.9 (32.8)</td>
<td>152.1 (34.7)</td>
</tr>
<tr>
<td>LDL cholesterol (mmol/L)</td>
<td>3.78 (0.85)</td>
<td>3.94 (0.90)</td>
</tr>
<tr>
<td>Statin initiation during follow-up (N, %) f</td>
<td>265 (18.5)</td>
<td>373 (18.9)</td>
</tr>
<tr>
<td>Current smoking (N, %)</td>
<td>288 (20.1)</td>
<td>381 (19.3)</td>
</tr>
<tr>
<td>Clark’s C of completeness of 10-year follow-up g</td>
<td>96.8%</td>
<td>96.9%</td>
</tr>
<tr>
<td>Lost to follow-up during 10-year follow-up (N, %)</td>
<td>10 (0.7)</td>
<td>13 (0.7)</td>
</tr>
<tr>
<td>Hard CHD events during 10-year follow-up (N, %)</td>
<td>98 (6.8)</td>
<td>62 (3.1)</td>
</tr>
</tbody>
</table>

Abbreviations: CHD, coronary heart disease; HDL, high-density lipoprotein; LDL, low-density lipoprotein.

a Individuals on statin treatment at baseline and persons with prevalent cardiovascular disease or diabetes mellitus are excluded from risk assessment.

b Values are mean (SD) or numbers (percentages).

c Numbers (percentage) of men and women on hypertension treatment at baseline.

d Numbers (percentage) of men and women who were not receiving antihypertensive medication at baseline and were prescribed antihypertensive over the course of follow-up.

e Numbers (percentage) of men and women on lipid lowering medication at baseline. (Statins constituted 96% of all lipid lowering medications at baseline)

f Numbers (percentage) of men and women who were not receiving lipid lowering medication at baseline and were prescribed statins over the course of follow-up.
### eTable 6. Characteristics of the Study Population for CVD Mortality Risk Estimation

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men (N=1,366)</strong></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>64.7 (5.1)</td>
</tr>
<tr>
<td>Systolic blood pressure (mm Hg)</td>
<td>141 (21)</td>
</tr>
<tr>
<td>Diastolic blood pressure (mm Hg)</td>
<td>80 (11)</td>
</tr>
<tr>
<td>Antihypertensive treatment at baseline (N, %) c</td>
<td>210 (15.4)</td>
</tr>
<tr>
<td>Antihypertensive treatment during follow-up (N, %) d</td>
<td>488 (35.7)</td>
</tr>
<tr>
<td>Body mass index (kg/m²)</td>
<td>26.5 (3.2)</td>
</tr>
<tr>
<td>Total cholesterol (mg/dL)</td>
<td>222.0 (35.9)</td>
</tr>
<tr>
<td>Total cholesterol (mmol/L)</td>
<td>5.75 (0.93)</td>
</tr>
<tr>
<td>HDL cholesterol (mg/dL)</td>
<td>48.6 (12.0)</td>
</tr>
<tr>
<td>HDL cholesterol (mmol/L)</td>
<td>1.26 (0.31)</td>
</tr>
<tr>
<td>LDL cholesterol (mg/dL)</td>
<td>145.9 (33.2)</td>
</tr>
<tr>
<td>LDL cholesterol (mmol/L)</td>
<td>3.78 (0.86)</td>
</tr>
<tr>
<td>Statin initiation during follow-up (N, %) f</td>
<td>298 (21.8)</td>
</tr>
<tr>
<td>Current smoking (N, %)</td>
<td>277 (20.3)</td>
</tr>
<tr>
<td>Clark’s C of completeness of 10-year follow-up b</td>
<td>99.6%</td>
</tr>
<tr>
<td>Lost to follow-up during 10-year follow-up (N, %)</td>
<td>10 (0.7)</td>
</tr>
<tr>
<td>CVD deaths during 10-year follow-up (N, %)</td>
<td>50 (3.7)</td>
</tr>
</tbody>
</table>

| **Women (N=1,816)**                                |                |
| Age (years)                                         | 66.7 (5.0)     |
| Systolic blood pressure (mm Hg)                     | 138 (20)       |
| Diastolic blood pressure (mm Hg)                    | 76 (10)        |
| Antihypertensive treatment at baseline (N, %) c     | 328 (18.1)     |
| Antihypertensive treatment during follow-up (N, %) d| 627 (35)       |
| Body mass index (kg/m²)                             | 26.8 (4.2)     |
| Total cholesterol (mg/dL)                           | 236.3 (35.5)   |
| Total cholesterol (mmol/L)                          | 6.12 (0.92)    |
| HDL cholesterol (mg/dL)                             | 59.8 (15.1)    |
| HDL cholesterol (mmol/L)                            | 1.55 (0.39)    |
| LDL cholesterol (mg/dL)                             | 151.7 (34.4)   |
| LDL cholesterol (mmol/L)                            | 3.93 (0.89)    |
| Statin initiation during follow-up (N, %) f         | 373 (20.5%)    |
| Current smoking (N, %)                              | 356 (19.6)     |

Abbreviations: CVD, cardiovascular disease; HDL, high-density lipoprotein; LDL, low-density lipoprotein.

- Individuals on statin treatment at baseline and persons with prevalent cardiovascular disease, diabetes mellitus, or chronic kidney disease are excluded from risk assessment.
- Values are mean (SD) or numbers (percentages).
- Numbers (percentage) of and women on hypertension treatment at baseline.
- Numbers (percentage) of and women who were not receiving antihypertensive medication at baseline and were prescribed antihypertensive over the course of follow-up.
- Numbers (percentage) of and women on lipid lowering medication at baseline. (Statins constituted 96% of all lipid lowering medications at baseline)
- Numbers (percentage) of and women who were not receiving lipid lowering medication at baseline and were prescribed statins over the course of follow-up.
**eTable 7. Population at Different Risk Categories Based on the Three Risk Prediction Models**

<table>
<thead>
<tr>
<th>Risk categories</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N (%)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pooled Cohort Equation (ACC/AHA guideline)</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-year ASCVD risk &lt;5%</td>
<td>6 (0.4%)</td>
<td>466 (24.3%)</td>
</tr>
<tr>
<td>10-year ASCVD risk: 5%-7.5%</td>
<td>63 (4.2%)</td>
<td>342 (17.8%)</td>
</tr>
<tr>
<td>10-year ASCVD risk: 7.5%-10%</td>
<td>109 (7.2%)</td>
<td>269 (14.0%)</td>
</tr>
<tr>
<td>10-year ASCVD risk &gt;10%</td>
<td>1335 (88.2%)</td>
<td>843 (43.9%)</td>
</tr>
<tr>
<td>Total N</td>
<td>1,513</td>
<td>1,920</td>
</tr>
<tr>
<td><strong>ATP-III Risk Prediction Tool (ATP-III guideline)</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-year hard CHD risk &lt;10%</td>
<td>203 (14.2%)</td>
<td>1,758 (89.0%)</td>
</tr>
<tr>
<td>10-year hard CHD risk: 10%-20%</td>
<td>892 (62.3%)</td>
<td>200 (10.1%)</td>
</tr>
<tr>
<td>10-year hard CHD risk &gt;20%</td>
<td>336 (23.5%)</td>
<td>18 (0.9%)</td>
</tr>
<tr>
<td>Total N</td>
<td>1,431</td>
<td>1,976</td>
</tr>
<tr>
<td><strong>SCORE Project Equation (ESC guideline)</strong>&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-year CVD mortality risk &lt;1%</td>
<td>0 (0.0%)</td>
<td>174 (9.6%)</td>
</tr>
<tr>
<td>10-year CVD mortality risk: 1%-5%</td>
<td>602 (44.1%)</td>
<td>1,214 (66.9%)</td>
</tr>
<tr>
<td>10-year CVD mortality risk: 5%-10%</td>
<td>531 (38.9%)</td>
<td>333 (18.3%)</td>
</tr>
<tr>
<td>10-year CVD mortality risk &gt;= 10%</td>
<td>233 (17.0%)</td>
<td>95 (5.2%)</td>
</tr>
<tr>
<td>Total N</td>
<td>1,366</td>
<td>1,816</td>
</tr>
</tbody>
</table>

Abbreviations: ACC/AHA, American College of Cardiology/American Heart Association; ASCVD, atherosclerotic cardiovascular disease; ATP-III, Adult Treatment Panel III; CHD, coronary heart disease; SCORE, Systematic COronary Risk Evaluation; ESC, European Society of Cardiology; CVD, cardiovascular disease.

Values are numbers (percentages of total population) in each risk category.

<sup>a</sup> Risk categories are based on the Pooled Cohort Equation,<sup>9</sup> which underlies the ACC/AHA guideline.<sup>9</sup>

<sup>b</sup> Risk categories are based on the ATP-III risk calculator,<sup>11</sup> which underlies the ATP-III guideline.<sup>11</sup>

<sup>c</sup> Risk categories are based on the SCORE Project,<sup>14</sup> which underlies the ESC guideline.<sup>13</sup>
**eFigure 1.** Treatment Recommendations for Rotterdam Study Participants 55-65 Years Old (N=2069) and 65-75 Years Old (N=2140), Based on the 2013 ACC/AHA, 2001 ATP-III, and 2012 ESC Guidelines

A. Treatment recommendations for Rotterdam Study participants 55-65 years old (N=2069)\(^a\), based on the 2013 ACC/AHA, 2001 ATP-III, and 2012 ESC guidelines

<table>
<thead>
<tr>
<th></th>
<th>ACC/AHA Guideline</th>
<th>ATP-III Guideline</th>
<th>ESC Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>100%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Women</td>
<td>100%</td>
<td>60%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Abbreviations: ACC/AHA, American College of Cardiology/American Heart Association; ATP-III, Adult Treatment Panel-III; ESC, European Society of Cardiology.

Percentage of the population in different categories of treatment recommendations based on the 2013 ACC/AHA, \(^9\) 2001 ATP-III, \(^11\) and the 2012 ESC guidelines. \(^13\)

\(^a\) Individuals receiving statin treatment at baseline (n=133 men and n=141 women) were excluded.

(continued on next page)
eFigure 1. Treatment Recommendations for Rotterdam Study Participants 55-65 Years Old (N=2069) and 65-75 Years Old (N=2140), Based on the 2013 ACC/AHA, 2001 ATP-III, and 2012 ESC Guidelines (continued)

B. Treatment recommendations for Rotterdam Study participants 65-75 years old (N=2140) a, based on the 2013 ACC/AHA, 2001 ATP-III, and 2012 ESC guidelines

Abbreviations: ACC/AHA, American College of Cardiology/American Heart Association; ATP-III, Adult Treatment Panel-III; ESC, European Society of Cardiology.

Percentage of the population in different categories of treatment recommendations based on the 2013 ACC/AHA, 2001 ATP-III, and the 2012 ESC guidelines.13

a Individuals receiving statin treatment at baseline (n=182 men and n=189 women) were excluded.
**eFigure 2.** Observed 10-Year Risks of Hard ASCVD by Deciles of Predicted 10-Year Risk by the 2013 ACC/AHA Risk Prediction Model

Abbreviations: ASCVD, atherosclerotic cardiovascular disease; ACC/AHA, American College of Cardiology/American Heart Association.

Each point corresponds to the [predicted risk (95% CI); observed risk (95% CI)] for each decile as follows:

For Men:
- [7.6 (7.3-7.8); 3.9 (1.5-8.4)]
- [10.8 (10.7-10.9); 7.3 (3.7-12.7)]
- [12.9 (12.8, 13.0); 5.3 (2.3-10.2)]
- [15.0 (14.9-15.1); 6.6 (3.2-11.8)]
- [17.6 (17.5-17.7); 13.8 (8.8-20.3)]
- [20.2 (20.1-20.3); 13.2 (8.3-19.7)]
- [23.0 (22.8-23.1); 11.2 (6.7-17.3)]
- [27.0 (26.8-27.3); 17.2 (11.6-24.2)]
- [33.0 (32.7-33.3); 26.0 (19.2-33.8)]
- [48.2 (46.8-49.6); 22.4 (16.2-29.8)]

For Women:
- [2.4 (2.3-2.5); 1.0 (0.1-3.7)]
- [3.8 (3.8-3.9); 3.1 (1.2-6.7)]
- [6.1 (5.1, 5.2); 5.7 (2.9-10.0)]
- [6.4 (6.4-6.5); 3.1 (1.2-6.7)]
- [8.0 (7.9-8.1); 4.2 (1.0-8.0)]
- [12.2 (12.1-12.3); 13.5 (9.0-19.2)]
- [15.3 (15.1-15.4); 12.0 (7.7-17.4)]
- [19.8 (19.5-20.1); 8.3 (4.8-13.2)]
- [33.8 (31.8-33.9); 19.3 (13.9-25.6)]

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**eFigure 3.** Observed 10-year Risks of Hard CHD by Deciles of Predicted 10-Year Risk by the ATP-III Risk Prediction Model

Abbreviations: CHD, Coronary heart disease; ATP-III, Adult treatment panel-III.

Each point corresponds to the [predicted risk (95% CI); observed risk (95% CI)] for each decile as follows:

For men: [7.7 (7.5-7.9); 1.4 (0.2-4.4)], [10.1 (10.0-10.2); 2.8 (0.8-7.0)], [11.7 (11.6-11.8); 2.8 (0.8-7.0)], [13.0 (12.9-13.1); 4.2 (1.6-9.0)], [14.4 (14.3-14.5); 8.4 (4.4-14.2)], [15.8 (15.8-15.9); 7.0 (3.4-12.5)], [17.5 (17.4-17.6); 10.4 (5.9-16.6)], [19.6 (19.5-19.7); 4.2 (1.6-8.9)], [22.4 (22.2-22.6); 12.6 (7.6-19.2)], [29.1 (28.3-29.8); 14.7 (9.3-21.6)].

For women: [1.2 (1.1-1.2); 0.5 (0.01-2.8)], [2.0 (1.9-2.0); 0.5 (0.01-2.8)], [2.6 (2.6-2.6); 1.0 (0.1-3.6)], [3.2 (3.2-3.3); 3.5 (1.4-7.1)], [3.9 (3.9-3.9); 3.0 (1.1-6.5)], [4.7 (4.6-4.7); 2.5 (0.8-5.8)], [5.6 (5.6-5.7); 3.5 (1.4-7.1)], [7.0 (7.0-7.0); 3.6 (1.4-7.2)], [8.9 (8.8-9.0); 4.0 (1.8-7.8)], [14.5 (13.9-15.1); 9.1 (5.5-14.1)].
eFigure 4. Observed 10-Year Risks of Atherosclerotic CVD Mortality by Deciles of Predicted 10-Year Risk by the SCORE Risk Equation

Abbreviations: CVD, Cardiovascular disease; SCORE, Systematic COronary Risk Evaluation equation.

Each point corresponds to the [predicted risk (95% CI); observed risk (95% CI)] for each decile as follows:

For men: [1.9 (1.8-2.0); 0.7 (0.02-4.0)], [2.8 (2.8-2.9); 0.7 (0.02-4.0)], [3.5 (3.5-3.6); 0.7 (0.02-4.0)], [4.2 (4.2-4.3); 0.7 (0.02-4.0)], [5.1 (5.0-5.1); 1.5 (0.2-5.2)], [5.9 (5.8-5.9); 2.2 (0.5-6.3)], [7.0 (6.9-7.0); 4.4 (1.6-9.4)], [8.4 (8.3-8.5); 5.9 (2.6-11.3)], [10.7 (10.5-10.9); 10.1 (5.7-16.4)], [18.5 (17.2-19.7); 9.6 (5.2-15.8)].

For women: [0.8 (0.8-0.9); 0.0 (0.0-0.0)], [1.2 (1.2-1.3); 0.0 (0.0-0.0)], [1.7 (1.6-1.7); 0.0 (0.0-0.0)], [2.1 (2.1-2.1); 1.1 (0.1-3.9)], [2.6 (2.5-2.6); 1.1 (0.1-3.9)], [3.1 (3.1-3.2); 2.2 (0.6-5.5)], [3.8 (3.8-3.9); 2.7 (0.9-6.3)], [4.8 (4.8-4.9); 3.3 (1.2-7.1)], [6.4 (6.4-6.5); 4.4 (1.9-8.4)], [11.7 (11.0-12.3); 5.5 (2.7-9.9)].