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1Supplement to

## ${ }_{2}$ Pregnancy associated plasma protein-A as a зcardiovascular risk marker in patients with stable 4coronary heart disease during 10 years follow-up - a 5CLARICOR trial sub-study

6 Supplementary tables referenced in the main text are presented below.
7 Table S1. Logistic regression analyses of risk associated with elevated PAPP-A $\geq 4 \mathrm{mIU} / \mathrm{L}$

| Outcome | Variable | Discovery <br> cohort | Replication <br> cohort |
| :---: | :---: | :---: | :---: |
| Composite | Odds ratio | 1.46 | 1.13 |
| outcome | $\mathbf{9 5 \%} \mathbf{C I}$ | $1.06-1.99$ | $0.82-1.56$ |
|  | p-value | 0.019 | 0.45 |
| All-cause | Odds ratio | 1.66 | 1.64 |
| mortality | $\mathbf{9 5 \%}$ CI | $1.22-2.26$ | $1.18-2.27$ |
|  | p-value | 0.001 | 0.003 |

8 Shown are results from logistic regression models for the outcomes that violated the proportional hazard
9 assumption for age at entry. Adjustment was for established risk factors and co-morbidities, standard
10 biochemical predictors and treatments as shown in Supplementary Table 1, including age at entry. The 11 composite outcome was defined as AMI, unstable angina pectoris, cerebrovascular disease, or death due to any 12
cause. Abbreviations: PAPP-A, pregnancy-associated plasma protein A.
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Table S2. Risk of specific outcomes associated with elevated PAPP-A

| Outcome | Variable | Disc | rery | $\begin{array}{r} \text { Repli } \\ \text { col } \end{array}$ | tion <br> rt |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Acute myocardial infarction | $\begin{gathered} \text { Hazard } \\ \text { ratio } \\ 95 \% \text { CI } \end{gathered}$ | Model A | Model B | Model A | Model B |
|  |  | 1.19 | 1.15 | 0.93 | 0.87 |
|  |  | 0.92-1.56 | 0.88-1.50 | 0.68-1.26 | 0.64-1.18 |
|  | p-value | 0.19 | 0.32 | 0.65 | 0.37 |
| Unstable angina pectoris | Hazard ratio 95\% CI p-value | 1.13 | 1.13 | 0.85 | 0.81 |
|  |  | 0.83-1.54 | 0.83-1.54 | 0.60-1.21 | 0.57-1.17 |
|  |  | 0.43 | 0.44 | 036 | 0.27 |
| Cerebrovascular disease | Hazard ratio 95\% CI | 1.22 | 1.19 | 0.99 | 0.90 |
|  |  | 0.89-1.70 | 0.87-1.66 | 0.71-1.38 | 0.64-1.25 |
|  | p-value | 0.22 | 0.27 | 0.96 | 0.52 |
| Cardiovascular mortality | Hazard ratio 95\% CI <br> p-value | 1.28 | 1.24 | 1.48 | 1.27 |
|  |  | 0.97-1.70 | 0.93-1.65 | 1.14-1.92 | 0.97-1.65 |
|  |  | 0.079 | 0.14 | 0.003 | 0.084 |
| Noncardiovascular mortality | $\begin{aligned} & \text { Hazard } \\ & \text { ratio } \\ & 95 \% \text { CI } \\ & \text { p-value } \end{aligned}$ | 1.62 | 1.57 | 1.29 | ${ }^{1.23}$ |
|  |  | 1.27-2.08 | 1.22-2.03 | 0.99-1.70 | 0.93-1.61 |
|  |  | <0.001 | <0.001 | 0.062 | 0.14 |
| All-cause* mortality | $\begin{gathered} \text { Hazard } \\ \text { ratio } \\ 95 \% \mathrm{CI} \\ \text { p-value } \\ \hline \end{gathered}$ | 1.85 | 1.49 | 1.77 | 1.37 |
|  |  | 1.54-2.22 | 1.23-1.80 | 1.47-2.12 | 1.14-1.66 |
|  |  | <0.001 | <0.001 | <0.001 | 0.001 |

15 Results from Cox proportional hazards models are shown. Elevated PAPP-A was defined as baseline values $16 \geq 4 \mathrm{mIU} / \mathrm{L}$ and using those with PAPP-A $<4 \mathrm{mIU} / \mathrm{L}$ as referents. Model A was adjusted for age at entry and 17 sex. Model B was adjusted for established risk factors and co-morbidities, standard biochemical predictors and 18 treatments as shown in Supplementary Table 1. * Proportional hazards assumption was violated for age at 19 entry. Abbreviations: PAPP-A, pregnancy-associated plasma protein A.

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22 Table S3. The role of elevated PAPP-A when used in combination with 'standard predictors' in the prediction of outcome status

| Type of predictions | Standard predictors | PAPP-A added to <br> 'standard predictors' |
| :--- | :---: | :---: |
| Composite outcome |  |  |
| True favorable <br> predictions, $\mathbf{N}$ (\%) | $2910(48.7)$ | $2906(48.7)$ |
| True unfavorable <br> predictions, $\mathbf{N}$ (\%) | $1174(19.7)$ | $1164(19.5)$ |
| Total number of true <br> predictions, $\mathbf{N}$ (\%) | $4084(68.4)$ | $4070(68.2)$ |


|  | All-cause mortality |  |
| :--- | :---: | :---: |
| True favorable <br> predictions, N (\%) <br> True unfavorable <br> predictions, N (\%) | $4585(76.8)$ | $4584(76.8)$ |
| Total number of true <br> predictions, N (\%) | $392(6.57)$ | $405(6.78)$ |

24 Correct predictions of status of status of composite outcome (AMI, UAP, CVD, death) not experienced by
25 patient (favorable status) versus experienced by patient (unfavorable status) and for the outcomes death
26 (favorable status alive versus unfavorable status not alive) and correct predictions, in 2199 placebo patients.
27 Predictions of status was made at 3 years, at 6 years, and at 9 years following randomization. In all, for the
28 composite outcome 5972 predictions were made and for all-cause mortality 5971 predictions were made. The 29 first model includes the standard predictors listed in appendix $\mathbf{A}$ as covariates and the second model includes 30 the standard predictors plus binary PAPP-A as covariables.

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