Figure S1. Inclusion of patients per year. In the year 2021 we only included patients until June 30. The majority of CAC scores were performed in the last 2.5 years of the study period (2019-2021, 62.2%).

***Table S1. Patient characteristics of the total study population and the complete case sample***

|  | **Total sample** | **Complete case sample** |
|---|:---:|:---:|
|  | **n = 882** | **n = 787** |
| **Male, n (%)** | 248 (28.1) | 218 (27.7) |
| **Age (years), mean (SD)** | 53.5 (+/- 10.2) | 53.5 (+/- 10.3) |
| *Age < 40 years, n (%)* | 79 (9.0) | 72 (9.1) |
| *Age 40-50 years, n (%)* | 221 (25.1) | 200 (25.4) |
| *Age 50-60 years, n (%)* | 331 (37.5) | 295 (37.5) |
| *Age 60-70 years, n (%)* | 208 (23.6) | 180 (22.9) |
| *Age ≥ 70 years, n (%)* | 43 (4.9) | 40 (5.1) |
| **Hypertension, n (%)** | 269 (30.6) | 235 (29.9) |
| **Hypercholesterolemia, n (%)** | 204 (25.4) | 186 (23.6) |
| **Diabetes mellitus, n (%)** | 52 (5.9) | 50 (6.4) |
| **Current smoker, n (%)** | 162 (18.9) | 144 (18.3) |
| **Family history (premature) CVD, n (%)** | 299 (37.0) | 290 (36.8) |

*Abbreviations: n = number, SD = standard deviation, CVD = cardiovascular disease*

*Missing data per variable:*

*Hypertension: n = 2*

*Hypercholesterolemia: n = 9*

*Diabetes mellitus: n = 1*

*Current smoker: n = 26*

*Family history (premature) cardiovascular disease: n = 73*

***Table S2. Characteristics of patients with CAC score of 0 and CAC score > 0, according to PTP for CAD category***

| *Patients with low PTP* | CAC score = 0 (n = 263) | CAC score > 0 (n = 105) | *p* value |
|---|---|---|---|
| **Male, n (%)** | 56 (21.3) | 18 (17.1) | 0.37 |
| **Age (years), mean (SD)** | 45.8 (+/- 8.1) | 49.4 (+/- 7.3) | <0.0001* |
| **Hypertension, n (%)** | 48 (18.3) | 28 (26.7) | 0.07 |
| **Hypercholesterolemia, n (%)** | 38 (14.4) | 31 (29.5) | <0.001* |
| **Diabetes, n (%)** | 13 (5.0) | 10 (9.5) | 0.10 |
| **Current smoker, n (%)** | 57 (21.7) | 35 (33.3) | 0.02* |
| **Family history (premature) CVD, n (%)** | 98 (37.3) | 56 (53.3) | 0.005* |

| *Patients with intermediate PTP* | CAC score = 0 (n = 162) | CAC score > 0 (n = 173) | *p* value |
|---|---|---|---|
| **Male, n (%)** | 37 (22.8) | 36 (20.8) | 0.65 |
| **Age (years), mean (SD)** | 56.1 (+/- 8.1) | 61.3 (+/- 8.2) | <0.0001* |
| **Hypertension, n (%)** | 43 (26.5) | 93 (47.0) | <0.001* |
| **Hypercholesterolemia, n (%)** | 34 (21.0) | 55 (31.8) | 0.025* |
| **Diabetes, n (%)** | 4 (2.5) | 11 (6.4) | 0.085 |
| **Current smoker, n (%)** | 19 (11.7) | 25 (14.5) | 0.46 |
| **Family history (premature) CVD, n (%)** | 48 (29.6) | 59 (34.1) | 0.38 |

| *Patients with high PTP* | CAC score = 0 (n = 15) | CAC score > 0 (n = 69) | *p* value |
|---|---|---|---|
| **Male, n (%)** | 15 (100) | 56 (81.2) | 0.067 |
| **Age (years), mean (SD)** | 58.0 (+/- 7.6) | 61.8 (+/- 7.2) | 0.072 |
| **Hypertension, n (%)** | 2 (13.3) | 33 (47.8) | 0.014* |
| **Hypercholesterolemia, n (%)** | 4 (26.7) | 24 (34.8) | 0.55 |
| **Diabetes, n (%)** | 2 (13.3) | 10 (14.5) | 0.91 |
| **Current smoker, n (%)** | 3 (20.0) | 5 (7.2) | 0.13 |
| **Family history (premature) CVD, n (%)** | 4 (26.7) | 25 (36.2) | 0.48 |

*Abbreviations: CAC = coronary artery calcium, PTP = pre-test probability, CAD = coronary artery disease, n = number, SD = standard deviation, CVD = cardiovascular disease*

*\* indicates significant difference*

### Table S3. Characteristics of patients with CAC score of 0 and CAC score ≥ 100

| | CAC score = 0 (n = 440) | CAC score ≥ 100 (n = 106) | p value |
|---|---|---|---|
| **Male, n (%)** | 108 (24.5) | 44 (41.5) | <0.001* |
| **Age (years), mean (SD)** | 50.0 (+/- 9.5) | 61.7 (+/- 8.3) | <0.0001* |
| **Hypertension, n (%)** | 93 (21.1) | 62 (58.5) | <0.0001* |
| **Hypercholesterolemia, n (%)** | 76 (17.3) | 41 (38.7) | <0.0001* |
| **Diabetes, n (%)** | 19 (4.3) | 11 (10.4) | 0.014* |
| **Current smoker, n (%)** | 79 (18.0) | 19 (17.9) | 0.99 |
| **Family history (premature) CVD, n (%)** | 150 (34.1) | 37 (34.9) | 0.87 |

*Abbreviations: CAC = coronary artery calcium, n = number, SD = standard deviation, CVD = cardiovascular disease*

*\* indicates significant difference*

**Table S4. Characteristics of patients with CAC score of 0 and CAC score ≥ 100, according to PTP for CAD category**

| Patients with low PTP | CAC score = 0 (n = 263) | CAC score ≥ 100 (n = 16) | p value |
|---|---|---|---|
| Male, n (%) | 56 (21.3) | 4 (25.0) | 0.73 |
| Age (years), mean (SD) | 45.8 (+/- 8.1) | 51.5 (+/- 5.3) | 0.006* |
| Hypertension, n (%) | 48 (18.3) | 7 (43.8) | 0.013* |
| Hypercholesterolemia, n (%) | 38 (14.4) | 6 (37.5) | 0.014* |
| Diabetes, n (%) | 13 (5.0) | 1 (6.3) | 0.82 |
| Current smoker, n (%) | 57 (21.7) | 7 (43.8) | 0.041* |
| Family history (premature) CVD, n (%) | 98 (37.3) | 11 (68.8) | 0.012* |

| Patients with intermediate PTP | CAC score = 0 (n = 162) | CAC score ≥ 100 (n = 55) | p value |
|---|---|---|---|
| Male, n (%) | 37 (22.8) | 12 (21.8) | 0.88 |
| Age (years), mean (SD) | 56.1 (+/- 8.1) | 64.0 (+/- 7.3) | <0.0001* |
| Hypertension, n (%) | 43 (26.5) | 36 (65.5) | <0.0001* |
| Hypercholesterolemia, n (%) | 34 (21.0) | 23 (41.8) | 0.002* |
| Diabetes, n (%) | 4 (2.5) | 6 (10.9) | 0.01* |
| Current smoker, n (%) | 19 (11.7) | 9 (16.4) | 0.38 |
| Family history (premature) CVD, n (%) | 48 (29.6) | 15 (27.3) | 0.74 |

| Patients with high PTP | CAC score = 0 (n = 15) | CAC score ≥ 100 (n = 35) | p value |
|---|---|---|---|
| Male, n (%) | 15 (100) | 28 (80.0) | 0.062 |
| Age (years), mean (SD) | 58.0 (+/- 7.6) | 62.7 (+/- 7.6) | 0.05 |
| Hypertension, n (%) | 2 (13.3) | 19 (54.3) | 0.007* |
| Hypercholesterolemia, n (%) | 4 (26.7) | 12 (34.3) | 0.60 |
| Diabetes, n (%) | 2 (13.3) | 4 (11.4) | 0.85 |
| Current smoker, n (%) | 3 (20.0) | 3 (8.6) | 0,25 |
| Family history (premature) CVD, n (%) | 4 (26.7) | 11 (31.4) | 0.74 |

Abbreviations: CAC = coronary artery calcium, PTP = pre-test probability, CAD = coronary artery disease, n = number, SD = standard deviation, CVD = cardiovascular disease

* indicates significant difference

**Table S5. Association between number of risk factors and elevated CAC score (CAC score ≥ 100)**

**All patients**

| Number of risk factors | N total/CAC ≥ 100 | OR (95% CI) | p value |
|---|---|---|---|
| No risk factors | 184/17 | 1 | - |
| 1 risk factor | 192/33 | 2.03 (1.10-3.87) | 0.024* |
| 2 risk factors | 122/36 | 4.07 (2.19-7.86) | <0.0001* |
| ≥ 3 risk factors | 48/20 | 6.92 (3.23-15.07) | <0.0001* |

**Patients with low PTP**

| Number of risk factors | N total/CAC ≥ 100 | OR (95% CI) | p value |
|---|---|---|---|
| No risk factors | 97/1 | 1 | - |
| 1 risk factor | 102/4 | 3.54 (0.48-97.89) | 0.23 |
| 2 risk factors | 58/5 | 8.07 (1.20-217.4) | 0.03* |
| ≥ 3 risk factors | 22/6 | 31.0 (44.69-838.7) | 0.0001* |

**Patients with intermediate PTP**

| Number of risk factors | N total/CAC ≥ 100 | OR (95% CI) | p value |
|---|---|---|---|
| No risk factors | 73/7 | 1 | - |
| 1 risk factor | 71/17 | 2.91 (1.15-8.13) | 0.023* |
| 2 risk factors | 54/22 | 6.30 (2.52-17.60) | <0.0001* |
| ≥ 3 risk factors | 19/9 | 8.14 (2.48-28.52) | <0.001* |

**Patients with high PTP**

| Number of risk factors | N total/CAC ≥ 100 | OR (95% CI) | p value |
|---|---|---|---|
| No risk factors | 14/9 | 1 | - |
| 1 risk factor | 19/12 | 0.96 (0.21-4.16) | 0.95 |
| 2 risk factors | 10/9 | 4.33 (0.52-131.1) | 0.19 |
| ≥ 3 risk factors | 7/5 | 1.34 (0.18-13.4) | 0.78 |

*Risk factors were hypertension, hypercholesterolemia, diabetes mellitus, current smoking status and family history of (premature) CVD. All data were obtained from hospital medical records. Hypertension, hypercholesterolemia and diabetes mellitus were diagnosed by the treating physician.*

*Abbreviations: CAC = coronary artery calcium, N = number, OR = odds ratio, 95% CI = 95% confidence interval, PTP = pre-test probability*

*\* indicates significant difference*

### Table S6. Characteristics of patients with and without exercise ECG

| | with exercise ECG (n = 556) | without exercise ECG (n = 326) | p value |
|---|---|---|---|
| Male, n (%) | 195 (35.1) | 53 (16.3) | <0.0001* |
| Age (years), mean (SD) | 53.4 (+/- 10.1) | 53.8 (+/- 10.3) | 0.56 |
| Hypertension, n (%) | 156 (28.2) | 113 (34.7) | 0.043* |
| Hypercholesterolemia, n (%) | 122 (22.2) | 82 (25.3) | 0.30 |
| Diabetes, n (%) | 31 (5.6) | 21 (6.4) | 0.60 |
| Current smoker, n (%) | 101 (18.7) | 61 (19.2) | 0.86 |
| Family history (premature) CVD, n (%) | 183 (36.0) | 116 (38.5) | 0.47 |

*Abbreviations: ECG = electrocardiography, n = number, SD = standard deviation, CVD = cardiovascular disease*

*\* indicates significant difference*

Characteristics of patients with exercise ECG were fairly similar to patients without exercise ECG, besides a significantly higher rate of males (35.1% versus 16.3% without exercise ECG) and a lower rate of patients with hypertension.

*Table S7 Distribution of clinical symptom categories, CAC scores and PTP for CAD in patients with and without exercise ECG*

| | with exercise ECG (n = 556) | without exercise ECG (n = 326) | p value |
|---|---|---|---|
| **Clinical symptom category, n (%)** | | | <0.0001* |
| *Non-anginal chest pain* | 342 (61.5) | 233 (71.5) | |
| *Atypical angina* | 133 (23.9) | 44 (13.5) | |
| *Typical angina* | 27 (4.9) | 4 (1.2) | |
| *Dyspnea* | 54 (9.7) | 45 (13.8) | |
| **PTP for CAD** | | | <0.001* |
| *Low PTP* | 230 (41.4) | 170 (52.1) | |
| *Intermediate PTP* | 255 (45.9) | 136 (41.7) | |
| *High PTP* | 71 (12.8) | 20 (6.1) | |
| **CAC score** | | | 0.38 |
| *CAC score = 0* | 304 (54.7) | 197 (60.4) | |
| *CAC score = 1-99* | 173 (31.1) | 92 (28.2) | |
| *CAC score = 100-399* | 56 (10.1) | 26 (8.0) | |
| *CAC score ≥ 400* | 23 (4.1) | 11 (3.4) | |

*Abbreviations: CAC = coronary artery calcium, PTP = pre-test probability, CAD = coronary artery disease, ECG = electrocardiography, n = number*

*\* indicates significant difference*

In patients with exercise ECG there was a lower rate of individuals with non-anginal chest pain and a higher rate of individuals with atypical and typical angina. Therefore, in general, patients with exercise ECG had a higher PTP for CAD compared to patients without exercise ECG. Distribution of CAC scores did not differ significantly between groups.