**e-Table 1. Serum biomarkers in 2005, comparing subjects participating respectively alive but not participating in examination 2010**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **non-COPD** | |  | **COPD** | |  |  |  |
|  | **Non-participants n=262** | **Participants n=602** | **P1** | **Non-participants n=165** | **Participants n=350** | **P1** | **P** 2 | **P** 3 |
| MMP-9 (ng/ml), median (IQR) | 528 (442-612) | 485 (216-601) | **<0.001** | 577 (479-657) | 459 (133-623) | **<0.001** | **0.003** | 0.525 |
| TIMP-1 (ng/ml), median (IQR) | 287 (236-336) | 344 (210-602) | **<0.001** | 292 (241-344) | 319 (214-571) | **0.004** | 0.753 | 0.218 |
| MMP-9/TIMP-1-ratio, median (IQR) | 1.79 (1.39-2.35) | 1.05 (0.65-1.86) | **<0.001** | 1.88 (1.50-2.54) | 1.02 (0.56-2.09) | **<0.001** | 0.238 | 0.504 |
| Deceased individuals excluded from the analyses. Significant p-values in bold.  P**1** comparing non-participants and participants in non-COPD respectively COPD  P2 comparing non-COPD and COPD among non-participants.  P3 comparing non-COPD and COPD among participants. | | | | | | | | |

**e-Table 2. Univariate Cox regression analyses of risk for death expressed as HR (95%CI), analyses stratified for non–COPD and COPD.**

|  |  |  |
| --- | --- | --- |
|  | **Non–COPD** | **COPD** |
|  | **Hazard–ratio (95% CI)** | **Hazard–ratio (95% CI)** |
| Sex (female1) | 1.868 (1.197–2.913) | 1.488 (0.937–2.362) |
| Age2 | **1.102** (1.077–1.128) | **1.104** (1.076–1.132) |
| Pack years2 | 1.028 (1.013–1.042) | 1.007 (0.994–1.019) |
| Ex–smoker (non-smoker1) | **2.586** (1.594–4.195) | 1.198 (0.678–2.115) |
| Current smoker (non-smoker1) | 1.915 (0.958–3.830) | 1.184 (0.655–2.142) |
| Productive cough, prc (no prc1) | 1.348 (0.843–2.155) | **1.696** (1.097–2.623) |
| Heart disease (no heart disease1) | **3.231** (2.141–4.877) | **2.318** (1.505–3.572) |
| FEV1 % predicted 20052 | 0.216 (0.044–1.058) | **0.035** (0.010–0.119) |
| MMP–92 | **1.002** (1.001–1.003) | **1.003** (1.002–1.004) |
| TIMP–12 | 0.999 (0.998–1.000) | 0.999 (0.998–1.000) |
| MMP–9/TIMP–1 ratio2 | **1.183** (1.070–1.307) | **1.343** (1.133–1.591) |
| 1: Binary variable. 2: Continuous variable. Significant values in bold. | | |

**e-Table 3. Risk for death expressed as HR (95%CI), analyses stratified for non-COPD and COPD in a Cox regression model adjusting for sex, age, smoking-status, heart disease and FEV1%**

|  |  |  |
| --- | --- | --- |
|  | **Non-COPD** | **COPD** |
|  | **n=948** | **n=594** |
|  | **HR (95% CI)** | **HR (95% CI)** |
| Female | 1 (–) | 1 (–) |
| Male | **1.687** (1.06–2.686) | 1.486 (0.898–2.459) |
| Age1 | **1.106** (1.079–1.135) | **1.113** (1.082–1.144) |
| Non-smoker | 1 (–) | 1 (–) |
| Ex-smoker | **2.16** (1.305–3.574) | 1.068 (0.576–1.981) |
| Current smoker | **4.897** (2.341–10.245) | **2.201** (1.164–4.16) |
|  |  |  |
| No heart disease | 1 (–) | 1 (–) |
| Heart disease | **2.337** (1.492–3.659) | 1.19 (0.737–1.922) |
| FEV1% | 0.486 (0.11–2.143) | **0.064** (0.017–0.232) |
| MMP-9 2 | 1.001 (1–1.003) | **1.003** (1.001–1.004) |
| TIMP-1 2 | **0.997** (0.996–0.999) | 0.998 (0.997–1) |
| MMP-9/TIMP-1-ratio 2 | **1.105** (1.018–1.2) | **1.291** (1.072–1.556) |
| 1: Continuous variable. 2: Added one by one to the multivariate model. Significant values in bold. | | |

### e-Table 4. Risk for death expressed as HR (95%CI), analyses for COPD in a Cox regression model adjusting for sex, age, smoking-status, heart disease and productive cough.

|  |  |
| --- | --- |
|  | **COPD** |
|  | **n=594** |
|  | **HR (95% CI)** |
| Female | 1 (–) |
| Male | 1.54 (0.933–2.539) |
| Age | **1.112**  (1.082–1.144) |
| Non-smoker | 1 (–) |
| Ex-smoker | 1.296 (0.709–2.372) |
| Current smoker | **2.433** (1.274–4.646) |
| No heart disease | 1 (–) |
| Heart disease | 1.361 (0.843–2.197) |
| Productive cough | 0.995 (0.625–1.584) |
|  |  |
| MMP-91.2 | **1.003**  (1.002–1.004) |
| TIMP-11.2 | 0.998 (0.997–1.000) |
| MMP-9/TIMP-1-ratio1.2 | **1.306**  (1.088–1.568) |
| 1: Continuous variable. 2: Added one by one to the multivariate model. Significant values in bold. | |

### e-Table 5. Risk for death expressed as HR (95%CI), analyses stratified for non-COPD and COPD in a Cox regression model adjusting for sex, age, pack-years and heart disease.

|  |  |  |
| --- | --- | --- |
|  | **Non-COPD** | **COPD** |
|  | **n=948** | **n=594** |
|  | **HR (95% CI)** | **HR** |
| Female | 1 (–) | 1 (–) |
| Male | **1.739 (**1.092–2.767) | 1.436 (0.891–2.317) |
| Age1 | **1.105** (1.077–1.132) | **1.104** (1.075–1.133) |
| Pack years1 | **1.030** (1.016–1.044) | 1.009 (0.997–1.021) |
| No heart disease | 1 (–) | 1 (–) |
| Heart disease | **2.279** (1.468–3.540) | 1.239 (0.765–2.008) |
|  |  |  |
| MMP-91.2 | 1.001 (1.000–1.002) | **1.003** (1.002–1.005) |
| TIMP-11.2 | **0.998** (0.996–0.999) | 0.998 (0.997–1.000) |
| MMP-9/TIMP-1-ratio1.2 | 1.082 (0.998–1.174) | **1.357** (1.137–1.620) |
| 1: Continuous variable. 2: Added one by one to the multivariate model. Significant values in bold. | | |