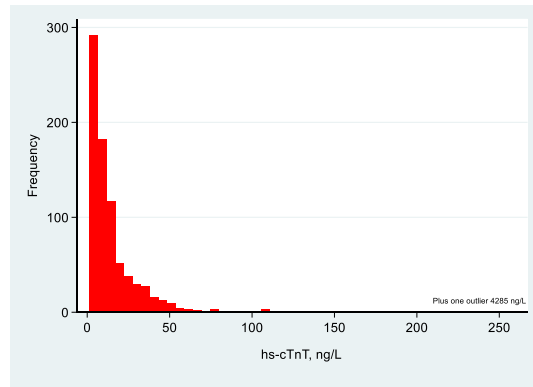


Online figure 1. Distribution of high-sensitivity Troponin T (hs-cTnT).



(The outlier had acute myocardial infarction).

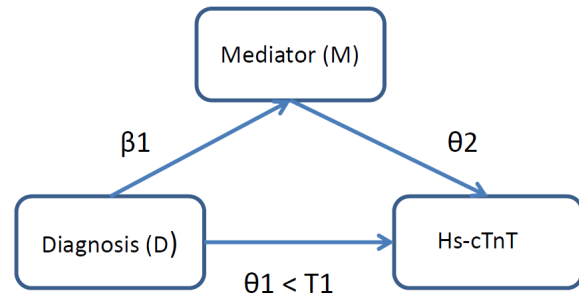
Mediation, prerequisites:

In our settings, the variable (M) was considered as a mediator of the relationship between the disease (D) and hs-cTnT provided that:

1. M was significantly associated with D (β_1 , Equation 1).
2. In a model with hs-cTnT as the outcome using D and M as explanatory variables, M was significantly associated with hs-cTnT (θ_2 , Equation 2).
3. In a model without M, D was significantly associated with hs-cTnT (T_1 , Equation 3).
4. In a model with M and D, the association between D and the hs-cTnT attenuated substantially (θ_1 , Equation 2).

In these analyses, we first investigated the association between M and D between M and relevant covariates (c), (eq 1). In these analyses, CRP as well as leucocytes were log-transformed. Thereby, we estimated the coefficients (β_1) between M and D. Second, we investigated the relationship between the outcome variable expressed as log-transformed hs-cTnT (\ln_ctnt), using D, M and relevant covariates (c) as explanatory covariates (eq 2). Thereby, we estimated the relationship between \ln_ctnt and D (θ_1). Third, we removed M from eq 2 and estimated the relationship between \ln_ctnt and D (T_1) unconditionally of M but kept the covariates (c). Finally, the indirect association between \ln_ctnt was calculated as the difference between β_1 and β_0 (eq 3: $IE = \beta_1 - \beta_0$). The corresponding z-score (and p-values) were obtained using bootstrapping.

Online figure 2.



- Eq 1:
 $E(M | D, c1) = \beta_0 + \beta_1 * D + \beta_{11} * c1$
- Eq 2:
 $E(\ln_cntnt | D, M, c2) = \theta_0 + \theta_1 * D + \theta_2 * M + \beta_{22} * c2$
- Eq 3:
 $E(\ln_cntnt | D, c2) = T_0 + T_1 * D + \beta_{32} * c2$
- Direct effect: θ_1
- Indirect effect: $IE = T_1 - \theta_1$
- Total effect: T_1
- $c1, c2$: other covariates in eq 1, eq 2 and 3, respectively.

The relationship between \ln_cntnt as the outcome variable and diagnoses with biomarkers as well as baseline hs-cTnT and follow-up time as covariates were estimated using linear mixed model (four models). In these analyses we used multiple imputations for C-reactive protein, oxygen tension, and creatinine (we had complete data for leucocytes, see online table 2). Standard errors for IE, and thereby the corresponding p-values, were obtained using bootstrapping. The continuous covariates were included in quartiles.

Online table 1a. The geometric mean of high sensitivity cardiac Troponin T (hs-cTnT), the ratio of hs-cTnT between index-group (Yes) and reference group (No) with geometric standard error (gse) and p-value by categorical covariables and study group at baseline (n = 380).

| Explanatory variables | Hs-cTnT, ng/L | | Ratio (gse, p-value) |
|---|---------------|-----|----------------------|
| | Yes | No | |
| Female gender: Yes vs. No | 5.4 | 8.7 | 0.62 (1.1, <0.001) |
| Coronary heart disease: Yes vs. No | 8.8 | 6.8 | 1.3 (1.2, 0.207) |
| q-wave in electrocardiogram: Yes vs. No | 10.5 | 6.8 | 1.5 (1.2, 0.034) |
| Arterial hypertension: Yes vs. No | 8.5 | 5.9 | 1.4 (1.1, <0.001) |
| Current smoking: Yes vs. No | 5.9 | 7.4 | 0.79 (1.2, 0.024) |

Online table 1b. The geometric mean of high sensitivity cardiac Troponin T (hs-cTnT) and the ratio of hs-cTnT (Ratio = $\text{hs-cTnT}_{Q_{n+1}} / \text{hs-cTnT}_{Q_n}$) between quartiles (Q1-4) of hs-cTnT with geometric standard error (gse), by continuous covariates in quartiles measured at baseline (n = 380).

| Variables (quartile limits) | Q1 | Q2 | Q3 | Q4 | Ratio [§] | gse | p-value |
|--|------|-----|-----|------|--------------------|------|---------|
| Age, years (60.0; 65.0; 70.0) | 4.7 | 6.3 | 7.2 | 10.6 | 1.3 | 1.04 | <0.001 |
| Leucocytes, x10 ⁹ /litres (5.7; 6.8; 8.1) | 5.8 | 6.2 | 7.3 | 8.6 | 1.1 | 1.05 | 0.002 |
| CRP, mg/litres (1.0; 3.0; 4.0) | 6.3 | 6.2 | 6.7 | 8.5 | 1.1 | 1.04 | 0.031 |
| Creatinine, mmol/litres (63.0; 72.0; 84.0) | 6.1 | 5.5 | 7.0 | 9.5 | 1.2 | 1.04 | <0.001 |
| FEV1, litres (0.9; 1.3; 2.0) | 10.2 | 6.8 | 5.4 | 5.8 | 0.82 | 1.04 | <0.001 |
| FVC, litres (2.1; 2.7; 3.5) | 8.4 | 6.9 | 6.4 | 5.9 | 0.89 | 1.05 | 0.011 |
| Arterial O2-tension, kPa (8.4; 9.2; 10.2) | 10.0 | 7.1 | 6.4 | 6.3 | 0.86 | 1.05 | 0.003 |
| Heart Rate, 1/minutes (63; 72; 80) | 6.0 | 6.0 | 6.9 | 10.0 | 1.2 | 1.05 | 0.001 |
| Tobacco, pack-years (0.4; 26.4; 45.0) | 6.1 | 6.8 | 7.1 | 7.7 | 2.1 | 1.04 | 0.086 |

§ Ratio = Q_n / Q_{n-1}

Online Table 1c. Baseline ratio of high-sensitivity troponin T and different levels of relevant covariates in three models using ordinary least square regression with missing values and a model using multiple imputations for missing values.

| Observations (N) | Ordinary Least Square Regression without imputation | | | | | | | | | Multiple Imputation | | |
|------------------------------------|---|------|---------|---------|------|---------|---------|------|---------|---------------------|------|---------|
| | N = 380 | | | N = 310 | | | N = 270 | | | N = 380 | | |
| Group | Ratio | GSE | p-value | Ratio | GSE | p-value | Ratio | GSE | p-value | Ratio | GSE | p-value |
| References | 1.00 | - | - | 1.00 | - | - | 1.00 | - | - | 1.00 | - | - |
| LTOT candidates | 2.82 | 1.25 | <0.001 | 2.25 | 1.28 | 0.001 | Omitted | | | 1.43 | 1.41 | 0.295 |
| Rehabilitation group | | | | | | | | | | | | |
| Outpatients | 1.33 | 1.17 | 0.065 | 1.24 | 1.18 | 0.193 | 0.67 | 1.29 | 0.118 | 1.08 | 1.36 | 0.794 |
| Institutional | 1.36 | 1.14 | 0.017 | 1.46 | 1.15 | 0.007 | 0.67 | 1.26 | 0.086 | 1.03 | 1.34 | 0.930 |
| COPD outpatients | 1.09 | 1.17 | 0.578 | Omitted | | | 0.39 | 1.27 | <0.001 | 0.60 | 1.36 | 0.102 |
| Sex: female vs. male | 0.60 | 1.09 | <0.001 | 0.63 | 1.11 | <0.001 | 0.60 | 1.13 | <0.001 | 0.59 | 1.11 | <0.001 |
| Age in quartiles | 1.25 | 1.04 | <0.001 | 1.22 | 1.05 | <0.001 | 1.12 | 1.05 | 0.035 | 1.16 | 1.04 | <0.001 |
| Pack-years in quartiles | | | | 0.95 | 1.05 | 0.302 | 1.01 | 1.05 | 0.901 | 0.97 | 1.04 | 0.488 |
| Arterial hypertension: Y vs. N | | | | 1.30 | 1.11 | 0.013 | 1.25 | 1.11 | 0.040 | 1.24 | 1.10 | 0.018 |
| Coronary arterial disease: Y vs. N | | | | 1.25 | 1.25 | 0.302 | 1.06 | 1.25 | 0.793 | 1.03 | 1.21 | 0.880 |
| Q-wave ECG: Y vs. N | | | | 1.22 | 1.20 | 0.286 | 1.18 | 1.20 | 0.352 | 1.17 | 1.17 | 0.317 |
| Heart rate in quartiles | | | | 1.19 | 1.05 | <0.001 | 1.07 | 1.05 | 0.201 | 1.09 | 1.04 | 0.040 |
| Continuous covariates in quartiles | | | | | | | | | | | | |
| Creatinine | | | | | | | 1.12 | 1.06 | 0.032 | 1.14 | 1.05 | 0.006 |
| C-reactive protein | | | | | | | 1.00 | 1.05 | 0.920 | 1.02 | 1.04 | 0.657 |
| Peripheral leucocytes | | | | | | | 1.04 | 1.05 | 0.387 | 1.05 | 1.04 | 0.224 |
| FEV1 | | | | | | | 0.76 | 1.06 | <0.001 | 0.76 | 1.05 | <0.001 |
| Arterial O2-tension | | | | | | | 0.93 | 1.06 | 0.197 | 0.93 | 1.05 | 0.116 |

GSE: geometric standard error, LTOT: long-term oxygen treatment, COPD: chronic obstructive pulmonary disease, ECG: electrocardiogram, FEV1: forced expiratory volume in 1 second.

Online table 2. The number of complete data, the percent of imputed numbers and the total number by baseline model and longitudinal models.

| Variable, quartiles | Complete | Imputed, % | Total |
|----------------------------------|----------|------------|-------|
| Baseline model | | | |
| Arterial O ₂ -tension | 305 | 20 | 380 |
| Heart rate | 310 | 18 | 380 |
| Q-wave ECG | 310 | 18 | 380 |
| C-Reactive Protein | 353 | 7 | 380 |
| Longitudinal models | | | |
| Arterial O ₂ -tension | 770 | 4 | 801 |
| C-Reactive Protein | 800 | 0 | 801 |
| Creatinine | 667 | 17 | 801 |
| Leucocytes | 801 | 0 | 801 |
| Heart rate | 786 | 2 | 801 |

Online table 3. International Classification of Disease code (ICD10), text explanation, the number of hs-cTnT measurements at baseline (N) and during the follow-up (n), and the corresponding geometric mean (gm) and geometric standard deviation (gsd) of high-specific Cardiac Troponin by Diagnoses at the follow-up.

| ICD10 | Diagnosis, text | N | n | n/N, % | Baseline | | Hospitalised | |
|----------------------------|--|-----|-----|--------|----------|-----|--------------|-----|
| | | | | | gm | gsd | gm | gsd |
| Acute Exacerbation of COPD | | | | | | | | |
| J44.0 | COPD with acute infection in the lower respiratory airways | 19 | 17 | 89 | 15.2 | 1.9 | 34.9 | 2.1 |
| J44.1 | Unspecified acute exacerbation of COPD | 130 | 122 | 94 | 12.2 | 2.5 | 18.2 | 2.1 |
| J96.0 | Acute Respiratory Failure | 1 | 1 | 100 | 14.4 | | 21.0 | |
| | Sum | 150 | 140 | 93 | 12.6 | 2.4 | 19.7 | 2.1 |
| Pneumonia | | | | | | | | |
| J13 | Pneumonia due to P.pneumonia | 5 | 4 | 80 | 12.2 | 4.2 | 17.8 | 1.8 |
| J14 | Pneumonia due to H.Influenzae | 1 | 1 | 100 | 13.0 | | 14.0 | |
| J15 | Bacterial Pneumonia, not elsewhere classified | 22 | 17 | 77 | 14.2 | 2.1 | 31.3 | 2.4 |
| J18 | Pneumonia, unspecified organism | 52 | 45 | 87 | 13.3 | 2.7 | 17.8 | 2.6 |
| | Sum | 80 | 67 | 84 | 13.5 | 2.6 | 20.5 | 2.5 |
| Other Lung diseases | | | | | | | | |

| | | | | | | | | |
|------------------------------------|--|----|----|-----|------|-----|-------|-----|
| J09 | Influenza due to certain identified viruses | 1 | 1 | 100 | 12.9 | | 29.0 | |
| J10 | Influenza due to other identified viruses | 3 | 3 | 100 | 11.4 | 2.2 | 43.7 | 2.9 |
| J12 | Viral pneumonia | 3 | 3 | 100 | 5.7 | 1.3 | 4.7 | 2.7 |
| J20 | Acute bronchitis | 3 | 2 | 67 | 9.7 | 1.4 | 28.4 | 1.1 |
| J22 | Unspecified lower respiratory infection | 1 | 0 | 0 | 7.1 | | | |
| J33 | Nasal polyp | 1 | 0 | 0 | 14.0 | | | |
| J43 | Emphysema | 2 | 1 | 50 | 15.8 | 2.8 | 15.0 | |
| J44 | Other chronic obstructive disease | 8 | 4 | 50 | 19.8 | 3.0 | 23.8 | 1.7 |
| J47 | Bronchiectasis | 1 | 0 | 0 | 10.0 | | | |
| J84 | Other interstitial pulmonary diseases | 1 | 0 | 0 | 3.9 | | | |
| J85 | Abscess of lung or mediastinum | 2 | 0 | 0 | 38.9 | 1.3 | | |
| J90 | Pleural effusion, not elsewhere classified | 1 | 0 | 0 | 31.2 | | | |
| J93 | Pneumothorax | 5 | 2 | 40 | 6.5 | 2.4 | 13.6 | 4.1 |
| J96 | Respiratory failure, not elsewhere classified | 11 | 5 | 45 | 6.8 | 2.2 | 8.8 | 1.7 |
| | Sum | 43 | 21 | 49 | 10.4 | 2.5 | 15.5 | 2.7 |
| Non-respiratory infections | | | | | | | | |
| A04 | Other intestinal infections | 1 | 1 | 100 | 6.0 | | 13.5 | |
| A09 | Other gastroenteritis and colitis, unspecified agent | 3 | 3 | 100 | 5.3 | 4.3 | 13.5 | 2.6 |
| A46 | Erysipelas | 1 | 1 | 100 | 13.0 | | 15.0 | |
| A49 | Bacterial infection, unspecified | 1 | 1 | 100 | 45.9 | | 162.0 | |
| | Sum | 6 | 6 | 100 | 9.0 | 3.5 | 25.4 | 3.3 |
| Diseases of the circulatory system | | | | | | | | |
| I11 | Hypertensive heart disease | 1 | 1 | 100 | 11.0 | | 22.0 | |
| I20 | Angina pectoris | 12 | 12 | 100 | 11.3 | 1.3 | 14.6 | 2.5 |
| I21 | Acute myocardial infarction | 7 | 7 | 100 | 7.4 | 2.1 | 161.5 | 6.2 |
| I24 | Other acute ischaemic heart disease | 1 | 1 | 100 | 11.0 | | 11.0 | |
| I25 | Chronic ischaemic heart disease | 8 | 7 | 88 | 10.6 | 1.7 | 15.9 | 2.8 |
| I26 | Pulmonary embolism | 2 | 2 | 100 | 12.6 | 1.4 | 14.5 | 1.0 |
| I42 | Acute myocarditis | 2 | 2 | 100 | 8.7 | 1.5 | 78.2 | 1.5 |
| I46 | Cardiac arrest | 1 | 1 | 100 | 2.1 | | 6.2 | |
| I48 | Atrial fibrillation and flutter | 6 | 6 | 100 | 4.6 | 3.0 | 28.2 | 2.1 |
| I50 | Heart failure | 3 | 2 | 67 | 18.4 | 2.2 | 15.5 | 1.0 |
| I60 | Subarachnoid haemorrhage | 1 | 1 | 100 | 14.0 | | 262.0 | |

| | | | | | | | | |
|----------------------------------|--|----|----|-----|------|-----|------|-----|
| I61 | Intracerebral haemorrhage | 2 | 2 | 100 | 4.7 | 1.5 | 7.1 | 1.6 |
| I63 | Cerebral infarction | 3 | 3 | 100 | 13.6 | 2.5 | 7.1 | 4.9 |
| I67 | Other cerebrovascular disease | 1 | 1 | 100 | 14.0 | | | |
| I71 | Aortic aneurysm and dissection | 1 | 0 | 0 | 9.3 | | | |
| I81 | Phlebitis and thrombophlebitis | 1 | 0 | 0 | 12.6 | | | |
| | Sum | 52 | 48 | 92 | 9.5 | 1.9 | 26.8 | 3.9 |
| Cancer | | | | | | | | |
| C21 | Malignant neoplasm of anus and anal canal | 1 | 0 | 0 | 3.0 | | 32.0 | |
| C25 | Malignant neoplasm of pancreas | 2 | 1 | 50 | 10.8 | 3.4 | 32.0 | |
| C34 | Malignant neoplasm of bronchus and lung | 8 | 3 | 38 | 7.7 | 1.6 | 38.7 | 2.0 |
| C50 | Malignant neoplasm of the breast | 1 | 0 | 0 | 4.6 | | | |
| C61 | Malignant neoplasm of prostate | 1 | 1 | 100 | 12.9 | | 17.0 | |
| C64 | Malignant neoplasm of the kidney, except renal pelvis | 2 | 1 | 50 | 13.6 | 3.2 | 38.0 | |
| C67 | Malignant neoplasm of the bladder | 3 | 1 | 33 | 8.2 | | 15.0 | |
| C72 | Malignant neoplasm of the spinal cord, cranial nerves and others | 1 | 0 | 0 | 5.9 | | | |
| C78 | Secondary malignant neoplasm of respiratory and digestive sites | 1 | 1 | 100 | 14.4 | | 16.0 | |
| C90 | Multiple myeloma | 1 | 1 | 100 | 8.9 | | 5.0 | |
| | Sum | 21 | 9 | 43 | 8.3 | 1.9 | 22.4 | 2.2 |
| Diseases of the digestive system | | | | | | | | |
| K21 | Gastro-oesophageal reflux disease | 2 | 1 | 50 | 3.4 | 1.2 | 5.0 | |
| K29 | Gastritis and duodenitis | 4 | 4 | 100 | 14.3 | 8.4 | 17.7 | 2.9 |
| K35 | Acute appendicitis | 1 | 0 | 0 | 45.5 | | | |
| K42 | Umbilical hernia | 1 | 0 | 0 | 14.0 | | | |
| K44 | Diaphragmatic hernia | 1 | 1 | 100 | 4.5 | | | |
| K52 | Other noninfective gastroenteritis and colitis | 1 | 0 | 0 | 11.0 | | | |
| K56 | Paralytic ileus and intestinal obstruction without hernia | 3 | 0 | 0 | 2.6 | 2.6 | | |
| K57 | Diverticular disease | 4 | 1 | 25 | 9.3 | 2.6 | 27.0 | |
| K61 | Abscess of anal and rectal regions | 1 | 0 | 0 | 1.5 | | | |
| K62 | Other diseases of anus and rectum | 1 | 0 | 0 | 12.0 | | | |
| K63 | Other diseases of intestine | 1 | 0 | 0 | 19.0 | | | |
| K72 | Hepatic failure, not elsewhere classified | 4 | 2 | 50 | 11.0 | 2.5 | 9.5 | 2.5 |
| K82 | Other diseases of the gall bladder | 1 | 0 | 0 | 10.5 | | 1.0 | |
| K92 | Other diseases of the digestive system | 1 | 1 | 100 | 7.3 | | 14.0 | |

| | | | | | | | | |
|-----------------|--|----|----|-----|------|------|------|-----|
| | Sum | 26 | 10 | 38 | 8.3 | 3.1 | 13.3 | 2.3 |
| Symptoms | | | | | | | | |
| R06 | Abnormalities of breathing | 1 | 0 | 0 | 1.5 | | | |
| R07 | Pain in chest and throat | 17 | 17 | 100 | 8.3 | 1.9 | 8.3 | 1.6 |
| R10 | Abdominal and pelvic pain | 4 | 2 | 50 | 11.8 | 2.9 | 8.9 | 2.3 |
| R11 | Nausea and vomiting | 1 | 1 | 100 | 1.5 | | 5.0 | |
| R19 | Other symptoms and signs involving the digestive system and bad. | 1 | 1 | 100 | 8.5 | | 8.0 | |
| R33 | Retention of urine | 1 | 0 | 0 | 7.7 | | | |
| R33 | Retention of urine | 2 | 0 | 0 | 11.9 | 1.1 | | |
| R42 | Dizziness and giddiness | 1 | 1 | 100 | 8.5 | | 5.0 | |
| R55 | Syncope and collapse | 2 | 2 | 100 | 2.1 | 1.6 | 11.2 | 2.4 |
| | Sum | 30 | 24 | 80 | 7.2 | 2.3 | 8.2 | 1.6 |
| Other diagnoses | | | | | | | | |
| D1 | Benign neoplasms of mouth and pharynx | 2 | 0 | 0 | 10.4 | 1.1 | | |
| D3 | Benign neoplasm of specified organs | 1 | 0 | 0 | 3.0 | | | |
| D4 | Benign neoplasm of uncertain origin | 1 | 0 | 0 | 10.0 | | | |
| D6 | Aplastic anaemia | 2 | 1 | 50 | 22.8 | 2.7 | 34.0 | |
| D7 | Other diseases of blood and blood-forming organs | 1 | 0 | 0 | 14.0 | | | |
| E0 | Disease of the thyroid gland | 1 | 0 | 0 | 5.3 | | | |
| E1 | Diabetes mellitus | 2 | 2 | 100 | 15.5 | 2.7 | 19.6 | 2.7 |
| E8 | Metabolic disease, unspecified | 3 | 3 | 100 | 26.3 | 1.5 | 17.0 | 2.9 |
| F0 | Organic mental disorder | 2 | 2 | 100 | 32.5 | 1.0 | 28.1 | 1.3 |
| F4 | Neurotic disorder | 1 | 1 | 100 | 11.0 | | 11.0 | |
| G4 | Episodic paroxysmal disorder | 4 | 2 | 50 | 6.8 | 2.6 | 19.9 | 3.1 |
| M1 | Inflammatory polyarthropathies or arthrosis | 4 | 0 | 0 | 6.4 | 2.1 | | |
| M4 | Dorsopathies, specified | 2 | 0 | 0 | 3.0 | 1.0 | | |
| M5 | Dorsopathies, unspecified | 3 | 1 | 33 | 1.9 | 1.5 | 4.0 | |
| M7 | Other tissue disorders | 1 | 1 | 100 | 12.9 | | | |
| N1 | Renal tubulo-interstitial diseases | 2 | 2 | 100 | 22.5 | 2.7 | 73.9 | 2.5 |
| N3 | Other diseases of urinary system | 3 | 2 | 67 | 10.9 | 1.3 | 12.0 | 1.1 |
| N8 | Noninflammatory disorders of female genital tract | 1 | 0 | 0 | 1.5 | | | |
| Q4 | Other congenital malformations of upper alimentary tract | 1 | 0 | 0 | 10.4 | | | |
| S0 | Injuries to the head | 3 | 2 | 67 | 13.8 | 12.8 | 24.6 | 9.5 |

| | | | | | | | | |
|----|--|----|----|-----|------|-----|------|-----|
| S2 | Injuries to the thorax | 2 | 0 | 0 | 11.2 | 1.0 | | |
| S3 | Injuries to the abdomen, lower back, lumbar spine or pelvis | 1 | 0 | 0 | 8.0 | | | |
| S4 | Injuries to the shoulder or upper arm | 2 | 0 | 0 | 3.4 | 1.0 | | |
| S5 | Injuries to the elbow and forearm | 1 | 0 | 0 | 3.5 | | | |
| S6 | Injuries to the wrist and hand | 1 | 0 | 0 | 1.5 | | | |
| S7 | Injuries to the hip and thigh | 6 | 2 | 33 | 14.0 | 1.7 | 54.1 | 2.4 |
| S8 | Injuries to the knee or lower leg | 1 | 0 | 0 | 1.5 | | | |
| T4 | Poisoning to narcotics and psychodysleptics | 4 | 3 | 75 | 6.4 | 1.7 | 17.3 | 1.3 |
| T8 | Complication to medical treatment | 3 | 1 | 33 | 6.2 | 3.4 | 36.0 | |
| Z0 | Health investigation | 1 | 1 | 100 | 11.0 | | 11.0 | |
| Z4 | Persons encountering health services for specific procedures | 1 | 0 | 0 | 11.5 | | | |
| Z5 | Persons with health hazards related to socioeconomic circumstances | 1 | 0 | 0 | 4.5 | | | |
| Z9 | Persons encountering health services in other circumstances | 1 | 0 | 0 | 7.8 | | | |
| | Sum | 65 | 26 | 40 | 8.3 | 2.7 | 21.5 | 2.5 |

Online table 4. The ratio, geometric standard error (gse) and p-value between leucocytes counts, C-reactive protein, and heart rate, respectively, at hospitalization and stable state by relevant covariates.

| Diagnosis Group | Leucocytes | | | C-reactive protein | | | Heart rate | | |
|----------------------------------|------------|------|---------|--------------------|------|---------|------------|------|---------|
| | Ratio | gse | p-value | Ratio | gse | p-value | Ratio | gse | p-value |
| COPD exacerbation | 1.35 | 1.07 | <0.001 | 4.37 | 1.25 | <0.001 | 0.99 | 1.03 | 0.795 |
| Pneumonia | 1.25 | 1.09 | 0.012 | 18.28 | 1.31 | <0.001 | 0.99 | 1.03 | 0.732 |
| Other lung diseases | 1.27 | 1.15 | 0.086 | 2.77 | 1.55 | 0.020 | 1.08 | 1.06 | 0.165 |
| Non-respiratory infections | 1.73 | 1.22 | 0.005 | 9.35 | 1.87 | <0.001 | 0.93 | 1.04 | 0.043 |
| Circulatory diseases | 1.28 | 1.11 | 0.017 | 1.55 | 1.41 | 0.200 | 1.03 | 1.03 | 0.381 |
| Cancer | 1.64 | 1.25 | 0.026 | 2.29 | 2.04 | 0.244 | 0.97 | 1.08 | 0.692 |
| Digestive diseases | 1.16 | 1.16 | 0.320 | 1.18 | 1.62 | 0.738 | 1.06 | 1.06 | 0.258 |
| Symptoms | 1.39 | 1.13 | 0.009 | 1.83 | 1.51 | 0.142 | 1.04 | 1.03 | 0.297 |
| Other diagnoses | 1.37 | 1.25 | 0.154 | 2.03 | 2.01 | 0.309 | 1.01 | 1.04 | 0.872 |
| Follow-up time: years | 1.01 | 1.02 | 0.770 | 1.00 | 1.08 | 0.962 | 0.97 | 1.01 | <0.001 |
| Continuous covariates: quartiles | | | | | | | | | |
| Hs-cTnT at stable state | 1.00 | 1.02 | 0.790 | 1.02 | 1.06 | 0.740 | 1.04 | 1.01 | <0.001 |
| Peripheral leucocytes | n.i. | | | 1.38 | 1.08 | <0.001 | 1.04 | 1.01 | <0.001 |
| C-Reactive protein | 1.04 | 1.02 | 0.063 | n.i. | | | 1.01 | 1.01 | 0.324 |
| Creatinine | 1.01 | 1.02 | 0.450 | 0.98 | 1.07 | 0.798 | 0.97 | 1.01 | <0.001 |
| Arterial O2-tension | 1.00 | 1.02 | 0.851 | 0.85 | 1.07 | 0.014 | 0.98 | 1.01 | 0.017 |
| Heart rate | 1.08 | 1.02 | <0.001 | 0.99 | 1.07 | 0.928 | n.i. | | |

n.i.: not included

Online table 5. Ratio (R) with geometric standard error (gse) and p-value (p) between the level of high-sensitive Troponin T (hs-cTnT) at hospitalisation and stable state by diagnosis, study group, hs-cTnT at baseline and covariates at hospitalisation in five different models.

| | Full Model | | | Leucocytes removed | | | CRP removed | | | Heart Rate removed | | | Leuc. + CRP removed | | |
|---|------------|------|--------|--------------------|------|--------|-------------|------|--------|--------------------|------|--------|---------------------|------|--------|
| | R | gse | p | R | gse | p | R | gse | p | R | gse | p | R | gse | p |
| AECOPD | 1.08 | 1.12 | 0.513 | 1.16 | 1.12 | 0.182 | 1.14 | 1.12 | 0.243 | 1.06 | 1.12 | 0.602 | 1.25 | 1.11 | 0.036 |
| Pneumonia | 1.01 | 1.15 | 0.929 | 1.08 | 1.15 | 0.609 | 1.14 | 1.14 | 0.318 | 1.00 | 1.15 | 0.989 | 1.25 | 1.14 | 0.084 |
| Other Lung Dis. | 0.96 | 1.24 | 0.839 | 1.01 | 1.24 | 0.953 | 1.01 | 1.24 | 0.975 | 0.96 | 1.25 | 0.865 | 1.09 | 1.24 | 0.708 |
| Non-Resp. Infections | 1.79 | 1.36 | 0.061 | 2.03 | 1.36 | 0.022 | 1.94 | 1.36 | 0.032 | 1.73 | 1.36 | 0.079 | 2.28 | 1.36 | 0.007 |
| Circulatory Diseases | 1.98 | 1.18 | <0.001 | 2.12 | 1.18 | <0.001 | 1.97 | 1.18 | <0.001 | 1.94 | 1.18 | <0.001 | 2.13 | 1.18 | <0.001 |
| Cancer | 0.73 | 1.42 | 0.370 | 0.82 | 1.42 | 0.564 | 0.75 | 1.42 | 0.405 | 0.72 | 1.42 | 0.345 | 0.85 | 1.42 | 0.650 |
| Digestive Diseases | 1.32 | 1.27 | 0.242 | 1.35 | 1.27 | 0.215 | 1.31 | 1.27 | 0.255 | 1.34 | 1.27 | 0.226 | 1.34 | 1.27 | 0.224 |
| Symptom Diagnoses | 1.12 | 1.22 | 0.578 | 1.14 | 1.22 | 0.506 | 1.11 | 1.22 | 0.595 | 1.10 | 1.22 | 0.636 | 1.14 | 1.22 | 0.515 |
| Remaining Diagn. | 1.22 | 1.41 | 0.556 | 1.29 | 1.41 | 0.459 | 1.23 | 1.41 | 0.548 | 1.22 | 1.41 | 0.557 | 1.31 | 1.41 | 0.437 |
| Follow-up time. Yrs. | 1.12 | 1.04 | 0.004 | 1.13 | 1.04 | 0.002 | 1.12 | 1.04 | 0.004 | 1.11 | 1.04 | 0.006 | 1.13 | 1.04 | 0.002 |
| Continuous Covariates in quartiles | | | | | | | | | | | | | | | |
| hs-cTnT baseline | 1.87 | 1.03 | <0.001 | 1.87 | 1.03 | <0.001 | 1.88 | 1.03 | <0.001 | 1.89 | 1.03 | <0.001 | 1.87 | 1.03 | <0.001 |
| Continuous Covariates at admission in quartiles | | | | | | | | | | | | | | | |
| Leucocytes | 1.09 | 1.04 | 0.015 | removed | | | 1.10 | 1.04 | 0.005 | 1.11 | 1.04 | 0.003 | removed | | |
| CRP | 1.08 | 1.04 | 0.038 | 1.09 | 1.04 | 0.015 | removed | | | 1.08 | 1.04 | 0.034 | removed | | |
| Creatinine | 1.06 | 1.03 | 0.052 | 1.07 | 1.03 | 0.034 | 1.06 | 1.03 | 0.058 | 1.05 | 1.03 | 0.111 | 1.07 | 1.03 | 0.036 |
| Arterial O2 | 1.01 | 1.03 | 0.823 | 1.01 | 1.03 | 0.845 | 1.00 | 1.03 | 0.995 | 1.00 | 1.03 | 0.954 | 1.00 | 1.03 | 0.948 |
| Heart rate | 1.08 | 1.03 | 0.028 | 1.09 | 1.03 | 0.005 | 1.08 | 1.03 | 0.024 | removed | | | 1.10 | 1.03 | 0.003 |

AECOPD: Acute Exacerbation of COPD ·