

Supplemental file. Definition of myocardial infarction and myocardial injury subtypes.

MI was defined as myocardial necrosis caused by acute ischemia and diagnosed if there was evidence of myocardial necrosis, in form of elevated cTn with a rising or falling pattern, in a clinical setting of acute myocardial ischemia, such as ischemic symptoms, ischemic ECG findings, imaging evidence of new loss of viable myocardium or identification of an intracoronary thrombus.

Type 1 MI was defined as MI caused by a verified or highly suspected coronary artery plaque rupture, ulceration, fissuring or dissection resulting in an intracoronary thrombus formation.

Type 2 MI was defined as MI without intracoronary thrombus formation where conditions other than atherosclerotic CAD contributed to a cardiac oxygen supply/demand imbalance. The following conditions alone or together were accepted as potential triggering mechanisms (no specified cut off levels other than those presented in *the Third Universal Definition of MI* where used):

- Tachyarrhythmia
- Bradyarrhythmia
- Aortic dissection
- Severe aortic stenosis or insufficiency
- Shock (cardiogenic, hypovolemic or septic)
- Respiratory failure
- Severe anemia
- Hypertension with or without left ventricular hypertrophy
- Coronary spasm, endothelial dysfunction or embolism or vasculitis

Multifactorial myocardial injury was defined as evidence of myocardial necrosis in form of elevated cTn with or without a rising or falling pattern and *without* clear clinical evidence of ischemia (such as ischemic symptoms, ischemic ECG findings or imaging/autopsy findings supporting ischemic necrosis). The following conditions alone or together were accepted as potentially causing a multifactorial myocardial injury:

- Heart failure
- Takotsubo cardiomyopathy
- Severe pulmonary embolism or pulmonary hypertension
- Sepsis (not septic shock) or critically ill patients
- Renal failure
- Severe acute neurological diseases, e.g. stroke or subarachnoid hemorrhage
- Infiltrative diseases, e.g. amyloidosis or sarcoidosis
- Strenuous exercise

In addition, some patients, presenting with typical ischemic symptoms or ECG-changes, without an underlying provoking condition, and where the

cTn concentrations were only slightly elevated without a rising or falling pattern, were classified as unstable angina and categorized as multifactorial myocardial injury.

Non-ischemic myocardial injury was defined as evidence of myocardial necrosis in form of elevated cTn with or without a rising or falling pattern and *without* clear clinical evidence of ischemia (such as ischemic symptoms, ischemic ECG findings or imaging/autopsy findings supporting ischemic necrosis). The following conditions alone or together were accepted as potentially causing a non-ischemic myocardial injury:

- Cardiac contusion, surgery, ablation, pacing, or defibrillator shocks
- Rhabdomyolysis with cardiac engagement
- Myocarditis
- Cardiotoxic agents, e.g. anthracyclines or Herceptin