

**Area at risk**

The area of myocardium at risk of myocardial infarction after an acute coronary artery occlusion.

**Cardiac magnetic resonance imaging (MRI)**

An imaging technology that noninvasively assesses function and structure of the cardiovascular system. The technology uses magnetic field and pulses of radio wave energy to image the heart and vasculature.

**Cardioprotection**

Strategies and treatments for protecting the heart against the detrimental effects of acute ischemia/reperfusion injury on the myocardium.

**Heart failure**

The inability of the heart to pump enough blood to meet the body's demand. In heart failure, the organs and other tissues do not receive enough oxygen and nutrients to function properly. Common contributing factors in the inability of the heart to adequately function include hypertension and ischemic heart disease.

**Ischemic postconditioning**

An endogenous cardioprotective phenomenon in which brief cycles of ischemia and reperfusion applied at the onset of reperfusion render the myocardium tolerant of acute myocardial reperfusion injury.

**Ischemic preconditioning**

An endogenous cardioprotective phenomenon in which brief cycles of nonlethal ischemia and reperfusion render the myocardium tolerant of a subsequent, otherwise lethal, episode of acute ischemia/reperfusion injury.

**Myocardial salvage**

Amount of myocardium salvaged after an acute coronary artery occlusion by means of reperfusion or a therapeutic intervention applied at the onset of reperfusion in order to reduce myocardial infarct size.

**Positron emission tomography–magnetic resonance imaging (PET-MRI)**

Imaging that uses a combination of technologies to assess both morphology and function of the heart and vasculature. Magnetic resonance imaging is used to assess tissue morphology, while positron emission tomography is used to assess function.

**Primary percutaneous coronary intervention (PPCI)**

A nonsurgical procedure aimed at restoring blood flow to an occluded or obstructed coronary vessel in acute coronary syndromes. This involves the insertion of a balloon or other device on a catheter through a femoral or radial artery to the occlusion site, where the artery is then opened to restore blood flow.

**Remote ischemic conditioning**

An endogenous cardioprotective phenomenon in which brief cycles of nonlethal ischemia and reperfusion applied to an organ or tissue remote from the heart render the myocardium tolerant of a subsequent, otherwise lethal, episode of acute ischemia/reperfusion injury.

**ST-segment elevation myocardial infarction (STEMI)**

Acute myocardial infarction caused by complete acute coronary artery occlusion, most often due to a thrombotic occlusion forming at the site of a ruptured atherosclerotic plaque in one of the major coronary arteries.