

1.6. Abbreviations

Abbreviation	Meaning/Phrase
ACEi	angiotensin-converting enzyme inhibitor
ACS	acute coronary syndromes
AF	atrial fibrillation
AMI	acute myocardial infarction
ARB	angiotensin receptor blocker
ASCVD	atherosclerotic cardiovascular disease
CABG	coronary artery bypass grafting
CAD	coronary artery disease
CCD	chronic coronary disease
CDP	clinical decision pathway
CICU	cardiac intensive care unit
CR	cardiac rehabilitation
cTn	cardiac troponin
CVD	cardiovascular disease
DAPT	dual antiplatelet therapy
DOAC	direct oral anticoagulant
ECG	electrocardiogram
FDA	U.S. Food and Drug Administration
FFR	fractional flow reserve
FMC	first medical contact
GLP-1	glucagon-like peptide-1
HF	heart failure
hs-cTn	high-sensitivity cardiac troponin
IABP	intra-aortic balloon pump
ICD	implantable cardioverter-defibrillator
IVUS	intravascular ultrasound
LDL	low-density lipoprotein
LDL-C	low-density lipoprotein cholesterol
LV	left ventricular
LVEF	left ventricular ejection fraction
MACE	major adverse cardiovascular event
MCS	mechanical circulatory support
MI	myocardial infarction
MINOCA	MI with nonobstructive coronary artery disease
MVD	multivessel disease
NSTE-ACS	non-ST-segment elevation ACS
NSTEMI	non-ST-segment elevation myocardial infarction
OCT	optical coherence tomography
OR	odds ratio
PCI	percutaneous coronary intervention
PCSK9	proprotein convertase subtilisin/kexin type 9
PPCI	primary percutaneous coronary intervention
PPI	proton pump inhibitor
QOL	quality of life
RCT	randomized controlled trial
ROSC	return of spontaneous circulation

(continued in the next column)

Abbreviation	Meaning/Phrase
SGLT-2	sodium-glucose cotransporter-2
STEMI	ST-segment elevation myocardial infarction
UFH	unfractionated heparin
VA-ECMO	venoarterial extracorporeal membrane oxygenation

2. OVERVIEW OF ACS

2.1. Definition and Classification of ACS

ACS are typically caused by the disruption (rupture or erosion) of an unstable coronary artery atherosclerotic plaque with associated partial or complete coronary artery thrombosis and/or microemboli, resulting in diminished blood flow to the myocardium and subsequent myocardial ischemia (Figure 1).^{1,2} ACS includes 3 related clinical conditions that exist along a continuum of severity: (1) unstable angina, (2) non-ST-segment elevation myocardial infarction (NSTEMI), and (3) STEMI. The initial diagnosis and classification of ACS should be based on the clinical history and symptomatology, interpretation of the ECG (Table 3), and assessment of cardiac troponin (cTn). Unstable angina is defined by transient myocardial ischemia leading to diminished flow in the absence of significant myonecrosis detected by circulating troponin. In contrast, patients with more prolonged or severe myocardial ischemia are diagnosed with MI and have elevated biomarkers of myonecrosis. Patients with NSTEMI may have a partially occluded coronary artery leading to subendocardial ischemia, while those with STEMI typically have a completely occluded vessel leading to transmural myocardial ischemia and infarction (Figure 2).^{3,4} The pathophysiology of ACS can be dynamic and thus patients can rapidly progress from one clinical condition (eg, unstable angina, NSTEMI, STEMI) to another during the course of their presentation and initial evaluation and treatment. Other, less common causes of myocardial ischemia, among others, include coronary artery spasm, embolism, and dissection.³

This guideline will focus on the acute management of ACS, including unstable angina, NSTEMI, and STEMI, which are presumed to result from atherosclerotic plaque rupture or plaque erosion and subsequent thrombosis.⁴ Under the Universal Definition of MI, these MI events would be classified as type 1 MI events (Table 4).⁴ The diagnostic evaluation of chest pain and the management of type 2 MI, spontaneous coronary artery dissection, and MINOCA (MI with nonobstructive coronary artery disease) are covered in separate documents.^{5–8} A detailed description of the approach to the evaluation of patients with chest pain can be found in the 2021 AHA/ACC/AASE/CHEST/SAEM/SCCT/SCMR Chest Pain Guideline.⁵