Cardiovascular Health Nova Scotia Update to Antiplatelet Sections of the *Nova Scotia Guidelines for Acute Coronary Syndromes, 2008.*

ST Elevation Myocardial Infarction (STEMI)-Acute Coronary Syndrome Guidelines: Antiplatelet Update (May 20, 2014)	
Immediate Treatment of Suspected ST Elevation Myocardial Infarction	
9 Antiplatelet therapy	
9a	Acetylsalicylic (ASA) (160–325 mg non-enteric coated oral loading dose) should be administered immediately to all patients with suspected ACS who do not have contraindications and who have not been taking ASA previously [*Class 1 Level B*[1]*; Class 1 Level B*[2]] Patients with contraindications to ASA should be treated immediately with clopidogrel (300 mg oral loading dose). [*Class I, Level B* [2]]
9b	*STEMI patients receiving fibrinolytic therapy* should receive clopidogrel in addition to ASA. • STEMI patients' ≤75 years of age receiving fibrinolysis should receive an immediate 300 mg loading dose of clopidogrel. [*Class I, Level A*[1][2]] • STEMI patients >75 years of age receiving fibrinolysis should receive an immediate dose of 75 mg of clopidogrel.[*Class 1, Level A*[2][3]]
9c	*STEMI patients undergoing primary PCI* should receive a 300 mg oral loading dose of clopidogrel in addition to ASA prior to cardiac catheterization laboratory arrival. [*Strong recommendation, high- quality evidence*[4]] • At the discretion of the on-call interventional cardiologist, a higher loading dose of clopidogrel may be considered in high-risk patients being triaged immediately to the cardiac catheterization laboratory.[5] • If more rapid and/or a higher degree of platelet inhibition is needed in patients already treated with clopidogrel, cardiac catheterization laboratory administration of a 180 mg oral loading dose of ticagrelor should be considered in the absence of contraindications. [6] [*Strong recommendation, high- quality evidence*[4]]
9d	STEMI patients being medically managed (e.g. too late or high risk for fibrinolysis) who do not have contraindications should generally receive a 300 mg oral loading dose of clopidogrel in addition to ASA. [*Strong recommendation, high-quality evidence*[4]]
Additional Immediate and Subsequent Inpatient Treatment of STEMI	
14 Antiplatelet therapy	
14a	ASA (81 mg/day) should be continued throughout the hospital stay in all patients with STEMI who do not have contraindications. [*Class 1, Level A*[1][2]]
14b	$P2Y_{12}$ inhibitor therapy should be continued throughout the hospital stay in the majority of patients with STEMI who do not have contraindications [4].

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	• Patients who undergo primary PCI and are transitioned from clopidogrel to ticagrelor should continue ticagrelor 90 mg BID throughout hospitalization. [*Strong recommendation, moderate- quality evidence*[4]] • The remainder of patients should continue clopidogrel 75 mg PO once daily [OD] throughout hospitalization.[7]] [*Strong recommendation, high-quality evidence [4]]*
17 Role of CABG Surgery (and antiplatelet recommendations part of this section.)	
17a	In STEMI patients found to have disease that requires coronary artery bypass grafting (CABG), the timing of CABG should be determined by the patient's coronary anatomy and by their clinical status. [8]
17b	Patients with STEMI and cardiogenic shock and multi-vessel disease should be considered for emergent CABG[9] [*Class 1 Level B* [1]] and possibly left ventricular assist device implantation.[*Class IIb Level C* [1]] **Page the Ventricular Assist Device team through locating: 902-473-2220.**
17c	Patients with STEMI and other high-risk angiographic or clinical features should undergo CABG as soon as possible prior to hospital discharge. • The timing of surgery should be determined by weighing the risk of bleeding associated with immediate surgery versus the ischemic risk associated with deferred surgery. [8] [AAPI Consensus 2012[4]]
17d	STEMI patients without high-risk features who stabilize with initial medical therapy can potentially be discharged and return for surgery on a semi-urgent basis (within 2-4 weeks). Treadmill testing should be considered before discharge to rule out easily inducible ischemia and establish the safety of deferring CABG. [*Consensus 2014*]
17e	If clinical circumstances permit, clopidogrel or ticagrelor should be discontinued 5 days before CABG.[8] [*Strong recommendation, moderate-quality evidence[4]*]
17f	$P2Y_{12}$ inhibitor therapy should be restarted at maintenance dose within 48-72 hours after CABG when deemed safe to do so by the cardiac surgical team.[10] Patients should generally be restarted on the same $P2Y_{12}$ inhibitor that was administered pre-operatively [*Conditional recommendation, low-quality evidence*[10]]
Pharmacologic Secondary Prevention Therapy	
19 Antiplatelet therapy	
19a	ASA (81 mg daily) should be continued indefinitely in all STEMI patients without contraindications [Class 1 Level A[1][2]].
19b	All STEMI patients who undergo PCI should continue $P2Y_{12}$ inhibitor therapy following discharge. [*Strong recommendation, moderate-quality evidence*[4][10]] • The choice of agent and duration of therapy will depend upon the mode of reperfusion and the type of stent

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	inserted. [*Consensus Nova Scotia 2014*] • Ticagrelor 90 mg PO BID is only indicated in STEMI patients undergoing primary PCI and should be continued for 12 months irrespective of the type of stent inserted.[6] [*Class 1 Level [1]*] • The remainder of STEMI patients undergoing PCI should receive clopidogrel 75 mg PO OD. [*Strong recommendation, high- quality evidence*[4] • Patients receiving bare metal stents should generally continue clopidogrel for a minimum of one month. [*Class 1 Level C*[2]] • Patients receiving drug-eluting stents should generally continue clopidogrel for a minimum of 12 months. [*Class 1 Level B*[1]]
19c	In STEMI patients who are medically managed, there is no evidence to support continuation of clopidogrel beyond 2-4 weeks.[7] [*Consensus Nova Scotia 2014*]
19d	In STEMI patients who undergo CABG and are restarted on clopidogrel post-operatively should generally continue therapy for 12 months. [*Strong recommendation, moderate-quality evidence*[10]]

References:

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