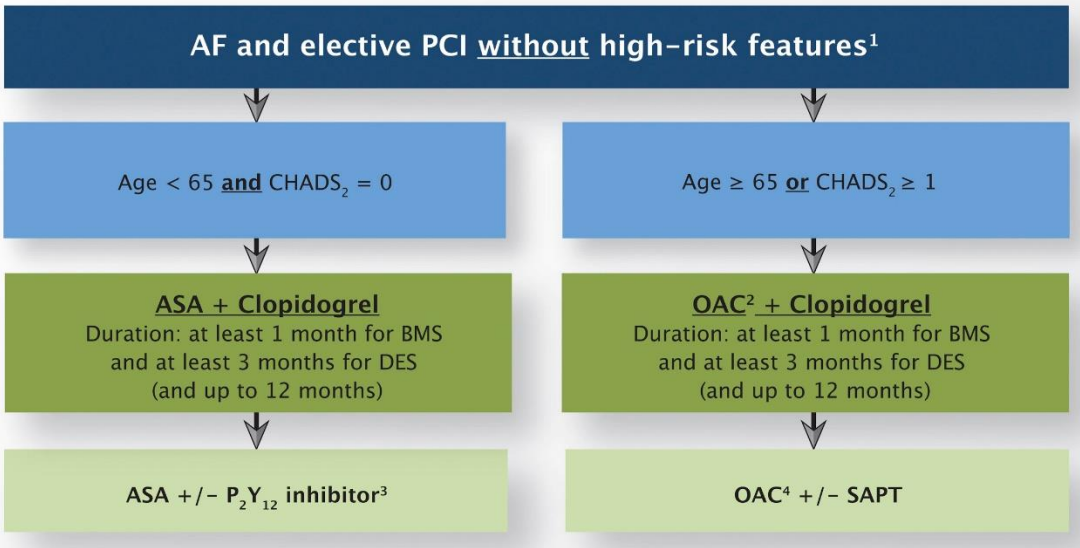


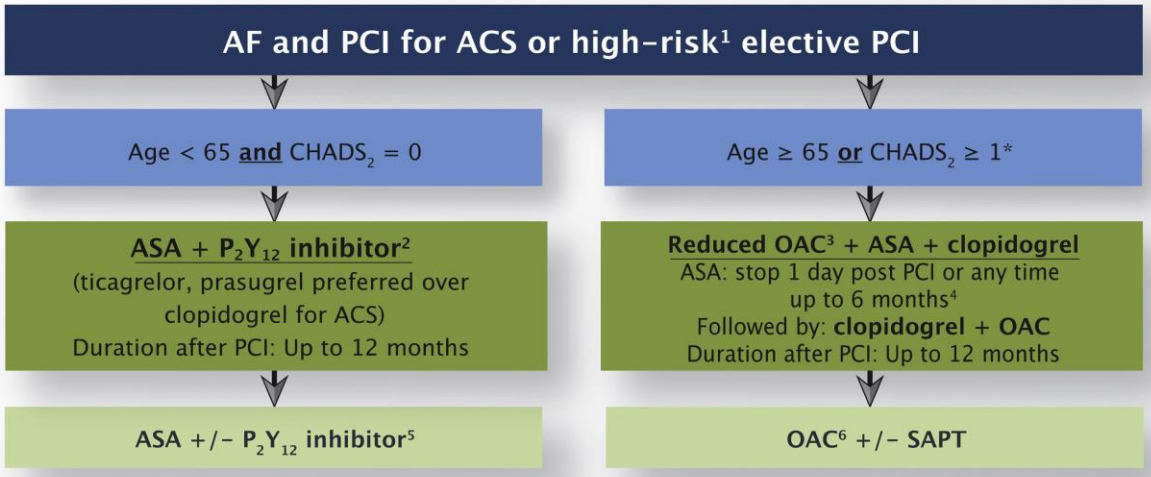
1 A PCI is considered high-risk based on clinical and angiographic features such as: diabetes mellitus, prior ACS, chronic renal dysfunction (creatinine clearance < 60 mL/min), prior stent thrombosis, current smoker, multi-vessel disease, multiple stents implanted, complex bifurcation lesion, total stent length > 60 mm, chronic total occlusion intervention or bioabsorbable vascular scaffold (BVS) implantation.

2 OAC regimens evaluated in this context include rivaroxaban 15 mg daily (10 mg in patients with renal dysfunction), dabigatran 110 mg or 150 mg BID and warfarin. If warfarin is to be used, recommended INR target is 2.0-2.5. All patients should receive a loading dose of ASA 160 mg at the time of PCI (if previously ASA naïve). Thereafter, ASA can be discontinued as early as the day following PCI.

3 Extended treatment with a P2Y12 inhibitor can be added to ASA if high-risk clinical or angiographic features of ischemic events develop and low risk of bleeding.

4 The dose of OAC beyond the initial period of antithrombotic therapy (up to a year after PCI) should be standard stroke prevention doses as per the CCS Atrial Fibrillation Guidelines. Single antiplatelet therapy with either ASA or clopidogrel may be added to OAC if high-risk clinical or angiographic features of ischemic events develop and low risk of bleeding.

AF: atrial fibrillation; ASA: acetylsalicylic acid; BMS: bare-metal stent; DES: drug-eluting stent; OAC: oral anticoagulant; PCI: percutaneous coronary intervention; SAPT: single antiplatelet therapy



***If CHADS2 =1 and Age< 65 another option for initial treatment (especially if high-risk for ischemic events) is DAPT alone using ASA+ticagrelor or ASA+prasugrel, similar to the recommendation for the CHADS2=0 patient**

1 A PCI is considered high-risk based on clinical and angiographic features such as: diabetes, prior ACS, chronic renal dysfunction (creatinine clearance < 60 mL/min), prior stent thrombosis, current smoker, multi-vessel coronary artery disease, multiple stents implanted, complex bifurcation lesion, total stent length > 60 mm, chronic total occlusion intervention or bioabsorbable vascular scaffold implantation.

2 Ticagrelor and prasugrel are recommended in ACS patients, whereas clopidogrel is recommended for elective PCI.

3 Regimens evaluated in the context of triple therapy include rivaroxaban 2.5 mg BID or warfarin. If warfarin is to be used, recommended INR target is 2.0-2.5. OAC options evaluated in the context of a dual pathway strategy include rivaroxaban 15 mg daily (plus clopidogrel) or dabigatran 110 mg/150 mg BID (plus clopidogrel).

4 DAPT will have been started as part of ACS management or prior to high risk elective PCI. ASA may be discontinued as early as the day following PCI or it can be continued longer term (eg. 1, 3 or maximum 6 months after PCI). The timing of when to discontinue ASA will vary, depending on the individual patient's ischemic and bleeding risk.

5 A P2Y12 inhibitor can be added to ASA if high-risk clinical or angiographic features of ischemic events and low risk of bleeding.

6 The dose of OAC beyond 1 year after PCI should be standard stroke prevention doses as per the CCS Atrial Fibrillation Guidelines. Single antiplatelet therapy with either ASA or clopidogrel may be added to OAC if high-risk clinical or angiographic features of ischemic events and low risk of bleeding.

AF: atrial fibrillation; ACS: acute coronary syndrome; ASA: acetylsalicylic acid; OAC: oral anticoagulant; PCI: percutaneous coronary intervention; DAPT: dual antiplatelet therapy; SAPT: single antiplatelet therapy

Table 1. High-risk clinical and angiographic features for thrombotic events

Feature
Clinical[14]
Before myocardial infarction or troponin-positive acute coronary syndrome
Diabetes mellitus treated with oral hypoglycemics or insulin*
Chronic kidney disease (creatinine clearance $\leq$ 60 mL/min)
Previous stent thrombosis
Current smoker
Angiographic
Multiple stents ($\geq$3 stents implanted, $\geq$ 3 lesions stented)[15] or use of a biodegradable vascular scaffold
Long lesion length (>60 mm total stent length)[15]
Complex lesions (bifurcation treated with 2 stents, stenting of chronic occlusion)[15]
Left main or proximal LAD stenting[16]
Multivessel PCI[17]

LAD, left anterior descending artery; PCI, percutaneous coronary intervention.

* Net benefit to diabetic patients in the absence of any of other high risk features is unclear.[18]

Table 2. Factors associated with increased bleeding risk

Need for OAC in addition to DAPT
Advanced age (older than 75 years)
Frailty
Anemia with hemoglobin < 110 g/L
Chronic renal failure (creatinine clearance < 40 mL/min)
Low body weight (<60 kg)
Hospitalization for bleeding within past year
Previous stroke/intracranial bleed
Regular need for NSAIDs or prednisone

DAPT, dual antiplatelet therapy; NSAIDs, nonsteroidal anti-inflammatory drugs; OAC, oral anticoagulation.

Reproduced from: Mehta, Shamir R.Armstrong, Paul W. et al. (2018)