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Key Highlights From the CCS/CAIC Guidelines for the Use of Antiplatelet Therapy

Akshay Bagai MD MHS

Interventional Cardiologist, St. Michael's Hospital

Associate Professor of Medicine, University of Toronto

Dr. Akshay Bagai

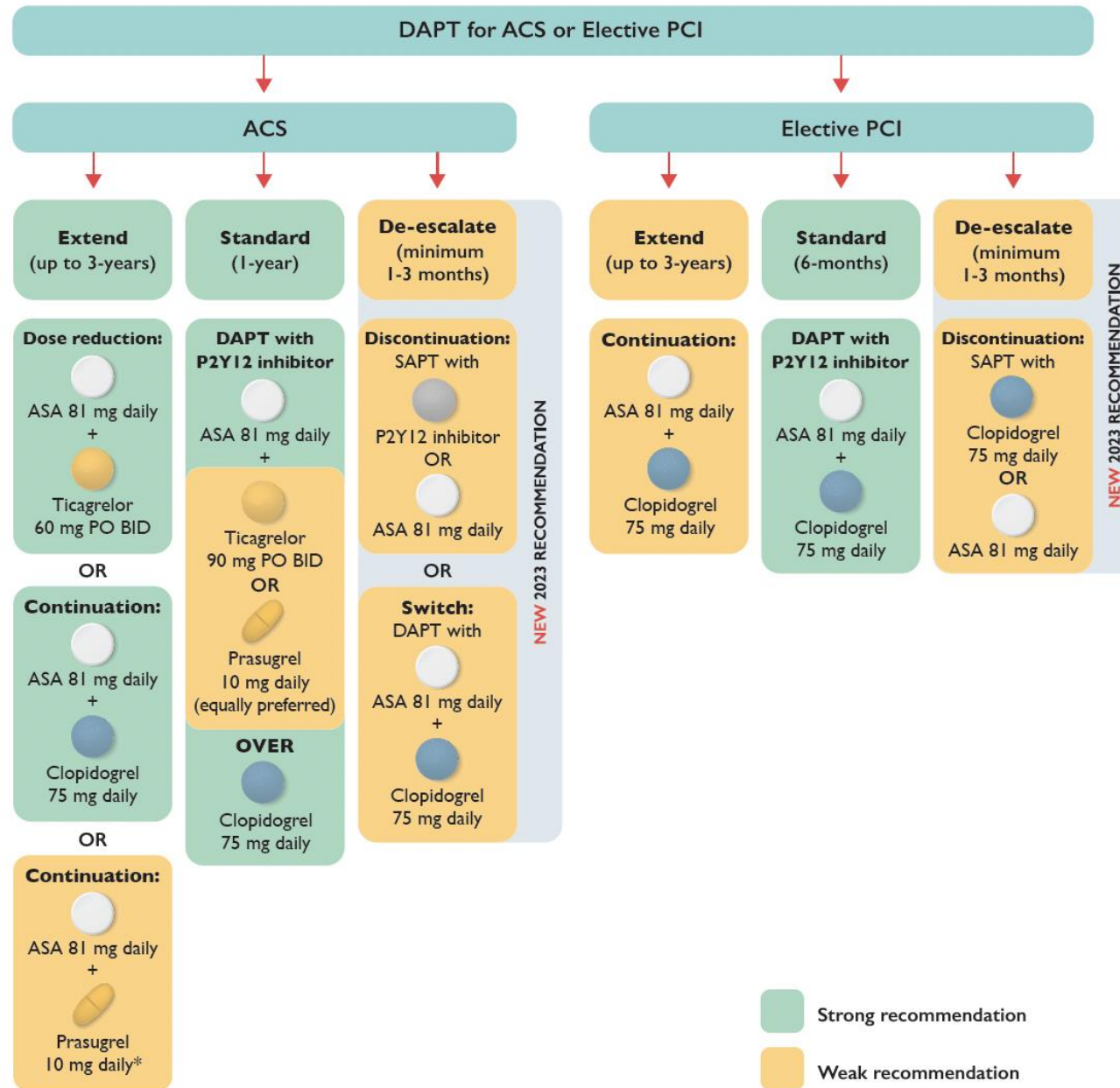
Antithrombotic management in patients with CAD and AF

Relationships with financial sponsors:

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- **Patents:** N/A
- **Other:** Teleflex - speaking

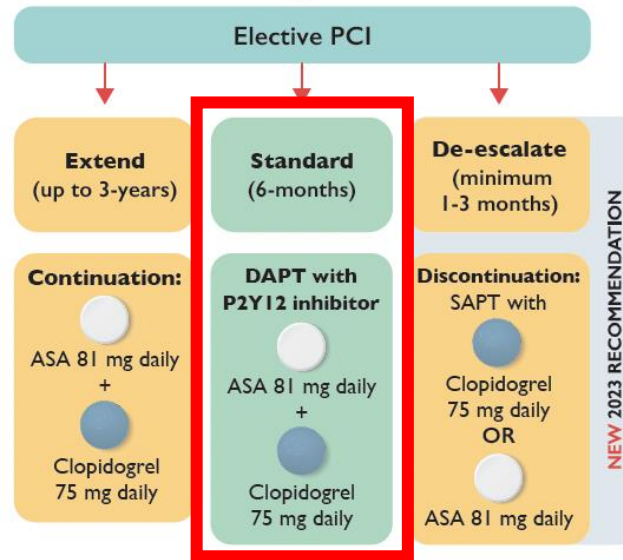
Learning Objectives



1. Duration of DAPT post elective PCI and post PCI for ACS
2. DAPT duration after PCI in Patients at High Bleeding Risk (HBR)
3. Use of APT in patients with atrial fibrillation requiring oral anticoagulation after PCI or medically managed ACS



Duration of DAPT post elective PCI

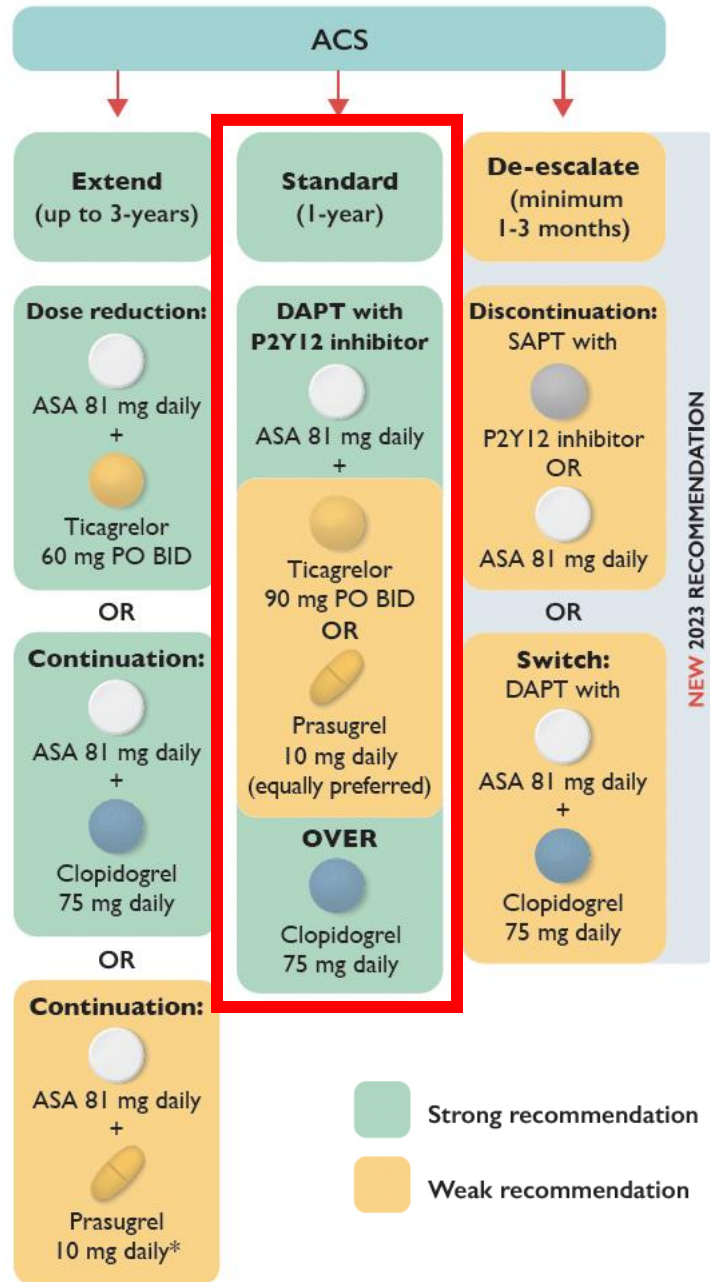
Standard duration is 6 months of DAPT with aspirin and clopidogrel



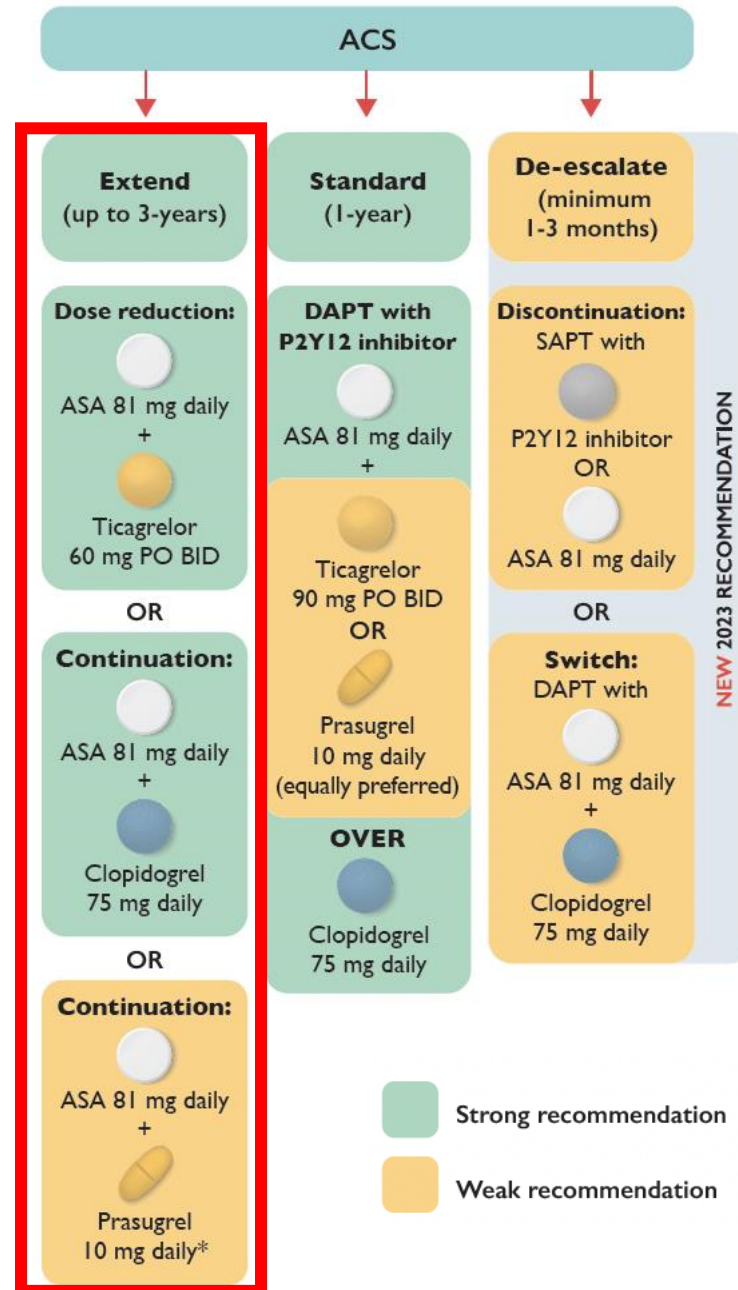
 Strong recommendation
 Weak recommendation

Duration of DAPT post PCI for ACS

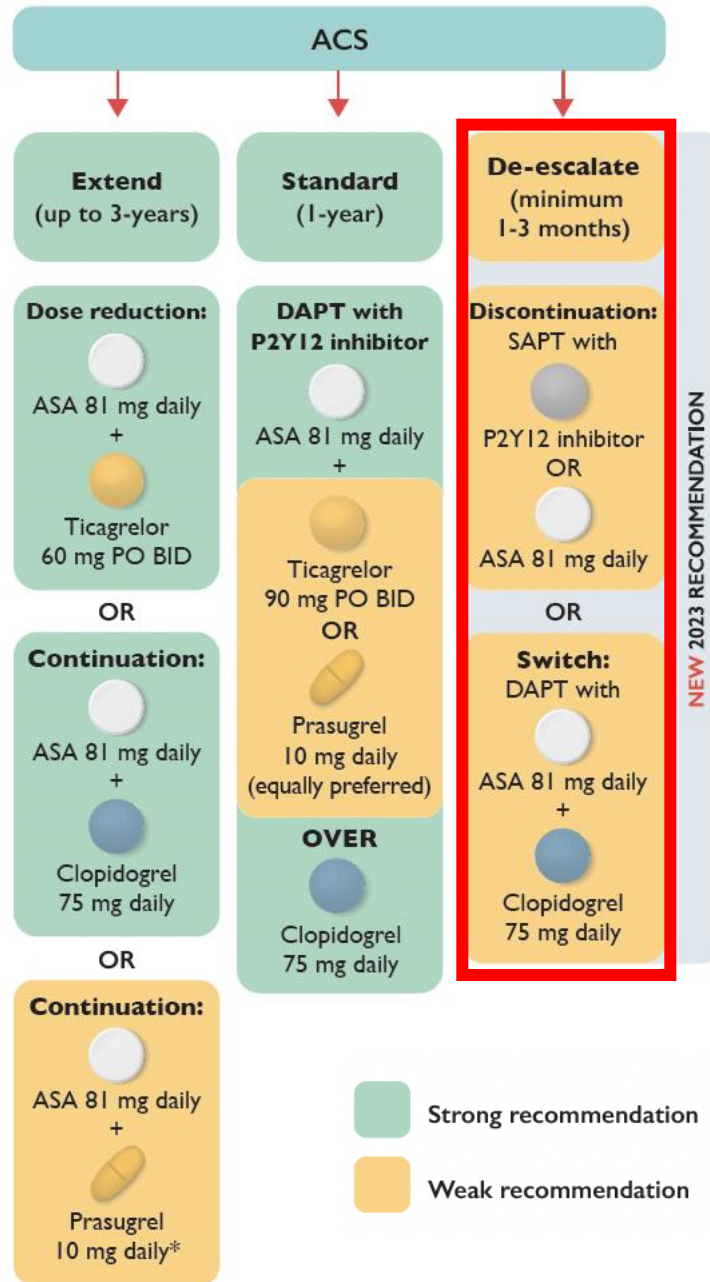
Standard duration is 1 year
with potent P2Y12
inhibitor (Ticagrelor or
Prasugrel)



Consider DAPT extension beyond 1 year in patients at high ischemic risk (e.g. recurrent ACS, stent thrombosis) and low bleeding risk



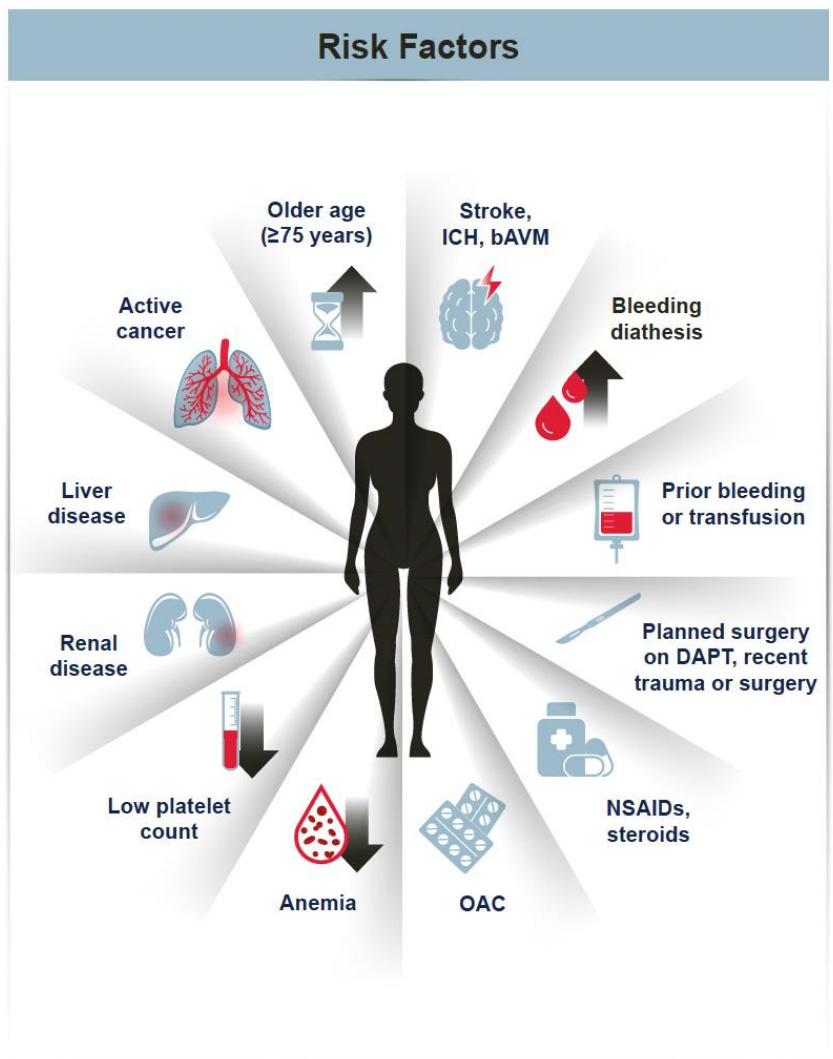
- Consider de-escalation after at least one month in patients unable to tolerate/afford potent DAPT
- SAPT or use DAPT with clopidogrel



DAPT Duration after PCI in patients at High Bleeding Risk (HBR)

Case presentation

- 81 y.o. female
- Past medical history:
 - CKD (eGFR 35)
 - Chronic anemia 90 g/L
- Presents with inferior STEMI
- Primary PCI of RCA with DES x 1 (complete revascularization)
- DAPT strategy?



Major Criterion Any 1 major = HBR	OR	Minor Criterion Any 2 minor = HBR
End-stage chronic kidney disease (CKD) (eGFR ≤30 mL/min/1.73m ²)		Moderate CKD (eGFR 30-59 mL/min/1.73m ²)
Liver cirrhosis with portal hypertension		✕
Active malignancy‡ (excluding non-melanoma skin cancer) within the past 12 months		✕
Spontaneous bleeding with hospitalization or transfusion <6 months, or any time if recurrent		Spontaneous bleeding with hospitalization or transfusion <12 months not meeting major criterion
Chronic bleeding diathesis		✕
Hemoglobin <110 g/L		Hemoglobin 110-129 g/L for men and 110-119 g/L for women
Moderate or severe baseline thrombocytopenia† (platelet count <100 x 10 ⁹ /L)		✕
Prior spontaneous ICH / Prior traumatic ICH <12 months / bAVM / Stroke <6 months		Any ischemic stroke at any time not meeting the major criterion
Anticipated use of long-term anticoagulation*		✕
✕		Long-term use of oral NSAIDs or steroids
Non-deferrable major surgery on DAPT		✕
Recent major surgery or trauma <30 days before PCI		✕
✕		Age ≥75 years

High Bleeding Risk(HBR)= 1 major or 2 minor criterion

- ✓ The patient is a high bleeding risk
 - 2 minor criterion (age>75 yrs., eGFR 30-59)
 - 1 Major criterion (Hb<110 g/L)

Recommendations

We suggest using short DAPT for 1-3 months rather than 6-12 months in patients at **HBR** undergoing PCI for ACS or elective PCI with maintenance single antiplatelet therapy thereafter

Use of APT in patients with atrial fibrillation requiring oral anticoagulation after PCI or medically managed ACS

Case presentation

- 79 y.o. female
- Past medical history: permanent AF (on DOAC), hypertension
- Presents with STEMI
- Primary PCI of the mid-LAD with 2 drug-eluting stents
- Discharged on day 3

Patient has Indication for DAPT and Anticoagulation

- PCI after ACS – DAPT for one year
- Atrial fibrillation – OAC lifelong
- Use of DAPT + OAC (“Triple therapy”) associated with significant bleeding risk
- Early omission of aspirin (after 3-5 days), i.e. using clopidogrel + OAC (“Dual pathway”) shown to be associated with less bleeding and no significant increase in ischemic risk

Recommendation: first 12 months

We suggest **dual pathway therapy** (P2Y12 inhibitor plus OAC and **discontinue ASA after 1-30 days**) rather than **triple therapy** (DAPT plus OAC) in the majority of patients with AF with an indication for OAC, and who have undergone PCI or who are medically-managed for an ACS

How long should this patient continue on Dual Pathway?

5 RCTs (n=4,964)
Median trial follow-up 12-30 months

Outcome	OAC Alone		Dual Pathway Therapy		RR [95%CI]	Heterogeneity
	Events	Total	Events	Total		
NACE (composite of all-cause death, MI, any stroke, systemic embolism or ISTH major bleeding)	244	2488	356	2476	1.47 [1.11-1.92]	I ² statistic: 62.3% Tau ² (between-study variance): 0.057 Cochran's Q test p-value: 0.041
All-cause Death	124	2488	166	2476	1.25 [0.67-2.22]	I ² statistic: 65.1% Tau ² (between-study variance): 0.147 Cochran's Q test p-value: 0.028
Cardiovascular Death	68	2488	94	2476	1.33 [0.75-2.38]	I ² statistic: 30.7% Tau ² (between-study variance): 0.072 Cochran's Q test p-value: 0.274
Myocardial Infarction	30	2488	27	2476	0.85 [0.38-1.92]	I ² statistic: 8.7% Tau ² (between-study variance): 0.047 Cochran's Q test p-value: 0.428
Stent Thrombosis*	3	1936	1	1940	0.71 [0.27-1.85]	I ² statistic: 0.0% Tau ² (between-study variance): 0.0001 Cochran's Q test p-value: 0.928
Ischemic Stroke	49	2488	49	2476	1.02 [0.63-1.67]	I ² statistic: 4.0% Tau ² (between-study variance): 0.011 Cochran's Q test p-value: 0.591
Any Stroke	56	2488	68	2476	1.16 [0.65-2.08]	I ² statistic: 22.4% Tau ² (between-study variance): 0.063 Cochran's Q test p-value: 0.366
Systemic Embolism	3	2488	3	2476	1.06 [1.00-1.14]	I ² statistic: 0.0% Tau ² (between-study variance): 0.0001 Cochran's Q test p-value: 0.985
MACE (composite of CV death, MI, ischemic stroke, systemic embolism) [†]	78	2488	83	2476	1.08 [0.64-1.79]	I ² statistic: 25.1% Tau ² (between-study variance): 0.041 Cochran's Q test p-value: 0.387
ISTH Major Bleeding	83	2488	160	2476	2.00 [1.19-3.45]	I ² statistic: 46.4% Tau ² (between-study variance): 0.091 Cochran's Q test p-value: 0.170

Beyond 1 year, compared with OAC alone, Dual Pathway associated with 2 fold greater major bleeding, 47% greater net adverse events with no difference in ischemic events including MI

Recommendation: after 12 months

We suggest **OAC monotherapy rather than dual-pathway therapy** (OAC plus antiplatelet therapy) in patients with CAD and concomitant AF with an indication for long-term OAC, who have not had a coronary revascularization procedure or ACS in the past 12 months.

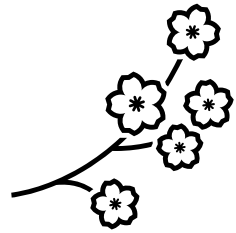
2023 Canadian Cardiovascular Society/Canadian Association of Interventional Cardiology

Focused Update of the Guidelines for the Use of Antiplatelet Therapy

Primary panel: Kevin R. Bainey MD, MSc (co-chair)^a, Guillaume Marquis-Gravel MD, MSc (co-chair)^b, Emilie Belley-Côté MD, PhD^c, Ricky D. Turgeon, PharmD^d, Margaret L. Ackman, PharmD^e, Hazal E. Babadagli, PharmD^f, David Bewick MD^g, Laurie-Anne Boivin-Proulx, MD, MSc^b, Warren J. Cantor, MD^h, Stephen E. Frenes MDⁱ, Michelle M. Graham, MD^j, Marie Lordkipanidzé, B.Pharm, PhD^k, Mina Madan, MD, MHS^l, Samer Mansour, MD^m, Shamir R. Mehta MD, MSc^c, Brian J. Potter, MDCM, SM^m, Jay Shavadia MDⁿ, Derek F. So MD^o, Jean-François Tanguay MD^b, Robert C. Welsh MD^a, Andrew T. Yan, MD^p

Secondary panel: Akshay Bagai, MD^a, Rodrigo Bagur, MD, PhD^r, Claudia Bucci, PharmD^s, Basem Elbarouni, MBBCh^t, Carol Geller, MD^u, Andrea Lavoie, MD^v, Patrick Lawler, MD^w, Shuangbo Liu, MD^t, John Mancini, MD^x, Graham C Wong, MD^x





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