Disclaimer

The Canadian Cardiovascular Society (CCS) welcomes reuse of our educational slide deck for medical institution internal education or training (i.e. grand rounds, medical college/classroom education, etc.). However, if the material is being used in an industry sponsored CME program, permission must be sought through our publisher Elsevier (www.onlinecjc.com).

If your reuse request qualifies as medical institution internal education, you may reuse the material under the following conditions:

- You must cite the Canadian Journal of Cardiology and the Canadian Cardiovascular Society as references.
- You may not use any Canadian Cardiovascular Society logos or trademarks on any slides or anywhere in your presentation or publications.
- Do not modify the slide content.
- If repeating recommendations from the published guideline, do not modify the recommendation wording.

2012 Focused Update on the Canadian Cardiovascular Society Guidelines for the use of Antiplatelet Therapy

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Rationale for Antiplatelet Guidelines

- Clinicians need clear guidance on the use of all risk prevention strategies to reduce the burden of ischemic vascular disease.
- Guidelines have long been available to provide evidence based care for the management of:
  - Lipids – CCS
  - Hypertension – CHEP
  - Diabetes – CDA
  - Many other disease states, but none, prior to this document specifically directed to antiplatelet therapy

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

AUTHORS

2012

Jean-François Tanguay, MD, CSPQ, FRCPC, FACC, FAHA, FESC, Alan D. Bell, MD, CCFP, Margaret L. Ackman, BSc(Pharm), PharmD, ACPR, FCSHP, Robert D. C. Bauer, MD, Raymond Cartier, MD, FRCPC, Wee-Shian Chan, MD, FRCPC, James Douketis, MD, FRCPC, André Roussin, MD, FRCPC, Gregory Schnell, BSP, MD, FRCPC, Subodh Verma, MD, PhD, FRCSC, Graham Wong, MD, MPH, FRCPC, FACC, Shamir Mehta, MD, MSc, FRCPC, FACC, FESC

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Primary Panel

Jean-François Tanguay MD, FRCPC FACC FAHA
Montreal Heart Institute

Shamir R. Mehta MD, MSc, FRCPC, FACC, FESC
McMaster University

Margaret Ackman PharmD, ACPR, FCSHP
University of Alberta

Robert Bauer, MD, FRCP (C) , FACC
University Health Networks, Western Division.

Alan Bell MD CCFP
University of Toronto

Gregory Schnell BSP, MD, FRCPC
Libin Cardiovascular Institute

Subodh Verma, MD, PhD, FRCSC, FAHA
Division of Cardiac Surgery, St. Michael's Hospital

Raymond Cartier, MD, FRCP (C)
Department of Surgery, Montréal Heart Institute

James Douketis M.D., F.R.C.P. (C)
McMaster University

Andre Roussin, MD, FRCP (C)
CHUM-University of Montreal

Graham C. Wong MD MPH FRCPC FAC
University of British Columbia

Wee-Shian Chan MD FRCPC MSc
University of British Columbia

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Secondary Panel Reviewers

Paul W Armstrong
David Fitchett
Michael Love
Pierre Théroux
Robert Welsh

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

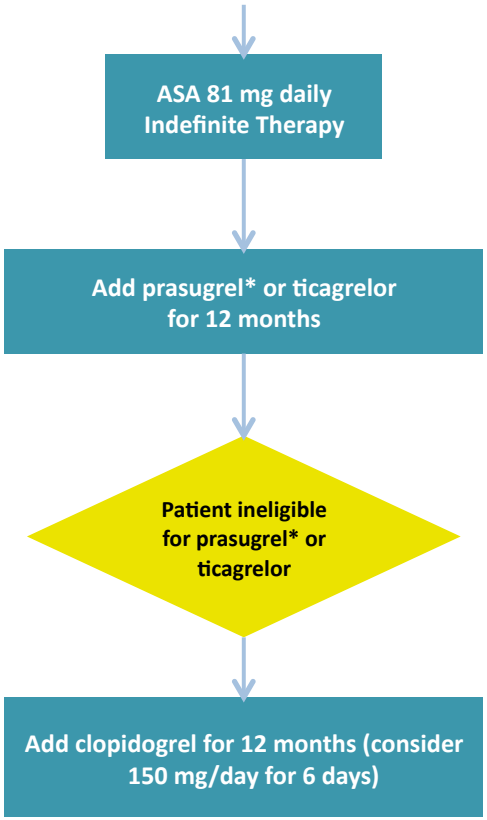
Updated evidence for antiplatelet therapy post-ACS in patients treated with PCI, CABG, or medical therapy alone.

RECOMMENDATIONS for NSTEACS

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Recommendations for Non-ST-Elevation Acute Coronary Syndrome

Coronary anatomy defined and PCI planned



*Prasugrel should be avoided in patients with prior TIA or stroke. In patients aged ≥75 years or body weight ≤60 kg, prasugrel should be used with caution and a 5 mg dose considered.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following NSTEACS

1. We recommend ASA 81 mg daily indefinitely in all patients with NSTEACS (Strong Recommendation, High Quality Evidence). For patients allergic to or intolerant of ASA, indefinite therapy with clopidogrel 75 mg daily is recommended

   (Strong Recommendation, High Quality Evidence)

   (Unchanged)

2. We recommend ticagrelor 90 mg twice daily over clopidogrel 75 mg daily for 12 months in addition to ASA 81 mg daily in patients with moderate to high risk NSTEACS managed with either PCI, CABG surgery or medical therapy alone.

   (Strong Recommendation, High Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following NSTEACS

3. We recommend prasugrel 10 mg daily over clopidogrel 75 mg daily for 12 months in addition to ASA 81 mg daily in $P2Y_{12}$ inhibitor-naive patients with NSTEACS after their coronary anatomy has been defined and PCI planned

   (Strong Recommendation, High Quality Evidence)

   (New)

New

4. We recommend avoiding prasugrel in patients with prior TIA or stroke or in patients who are not treated with PCI. Except in patients with a high probability of undergoing PCI, we recommend avoiding prasugrel before the coronary anatomy has been defined.

   (Strong Recommendation, Moderate Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following NSTEACS

5. We recommend clopidogrel 75 mg once daily for 12 months in addition to ASA 81 mg daily in patients with NSTEACS managed with either PCI, CABG, or medical therapy and who are not eligible for ticagrelor or prasugrel

   (Strong Recommendation, High Quality Evidence)

   (New) **New**

6. We recommend that in patients where clopidogrel is to be used, a higher maintenance dose of 150 mg daily be considered for the first 6 days in patients with NSTEACS treated with PCI

   (Strong Recommendation, Moderate Quality Evidence)

   (New) **New**

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Antiplatelet Therapy for Secondary Prevention in the First Year Following NSTEACS

Practical tips for ticagrelor and prasugrel

- In patients receiving DAPT, we suggest using ASA 81 mg daily.
- Ticagrelor can be used in patients managed with either PCI, CABG, or medical therapy alone, whereas prasugrel should be used only in patients undergoing PCI.
- In patients ≥75 years of age or weight ≤60 kg, when available, prasugrel 5 mg daily could be considered.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Updated evidence for antiplatelet therapy post-ACS in patients treated with PCI, CABG, or medical therapy alone.

RECOMMENDATIONS for STEMI

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following STEMI

1. We recommend ASA 81 mg daily indefinitely in all patients with STEMI
   (Strong Recommendation, High Quality Evidence).
   (Unchanged)
2. We recommend indefinite therapy with clopidogrel 75 mg daily for patients allergic to or intolerant of ASA
   (Strong Recommendation, High Quality Evidence)
   (Unchanged)
3. We recommend clopidogrel 75 mg daily for at least 1 month in addition to ASA 81 mg daily in patients with STEMI who were managed with either fibrinolytic therapy or no reperfusion therapy
   (Strong Recommendation, High Quality Evidence).
   Clopidogrel may be continued for 12 months
   (Weak Recommendation, Low Quality Evidence)
   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Antiplatelet Therapy for Secondary Prevention in the First Year Following STEMI

4. We recommend either prasugrel 10 mg daily or ticagrelor 90 mg twice daily over clopidogrel 75 mg daily for 12 months in addition to ASA 81 mg daily after primary PCI

   (Strong Recommendation, Moderate Quality Evidence)

   (New)

New

5. We recommend clopidogrel 75 mg daily for 12 months in addition to ASA 81 mg daily after primary PCI in patients who are not eligible for prasugrel or ticagrelor (Strong Recommendation, Moderate Quality Evidence)

   (New)

New

6. We recommend that in patients where clopidogrel is to be used, a higher maintenance dose of 150 mg daily be considered for the first 6 days in patients with STEMI treated with PCI

   (Strong Recommendation, Moderate Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following STEMI

7. We recommend avoiding prasugrel in patients with prior TIA or stroke and using a 5-mg dose if required in patients of age ≥75 years or weight ≤60 kg
   (Strong Recommendation, Low Quality Evidence)
   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following PCI

RECOMMENDATIONS FOR PCI for a NON-ACS INDICATION

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following PCI: NON-ACS INDICATION

1. We recommend clopidogrel 75 mg daily for at least 12 months in addition to ASA 81 mg daily indefinitely in patients receiving PCI with BMS or DES for a non-ACS indication

   (Strong Recommendation, High Quality Evidence)

   (Unchanged)

2. We recommend that in patients receiving a BMS who are unable to tolerate clopidogrel for 12 months (e.g. increased risk of bleeding or scheduled non-cardiac surgery), the minimum duration of therapy should be 1 month

   (Strong Recommendation, High Quality Evidence).

   In patients at very high risk of bleeding, the minimum duration of treatment may be 2 weeks

   (Weak Recommendation, Low Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following PCI: NON-ACS INDICATION

3. We recommend ASA 81 mg daily indefinitely in all patients who have undergone PCI

   (Strong Recommendation, Moderate Quality Evidence).

   (Unchanged)

4. We recommend that all patients undergoing PCI be assessed for their ability to tolerate and comply with DAPT for 1 year. In patients unable to tolerate or comply with DAPT for 1 year (e.g. increased risk of bleeding, scheduled noncardiac surgery, or anticipated poor compliance), BMS rather than DES should be used.

   (Strong Recommendation, Low Quality Evidence) (Unchanged)

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy for Secondary Prevention in the First Year Following PCI: NON-ACS INDICATION

5. We suggest that in patients receiving a second-generation DES who are unable to tolerate clopidogrel for 12 months (e.g. increased risk of bleeding or scheduled noncardiac surgery), the minimum duration of therapy may be 3 months.

   (Weak Recommendation, Low Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Updated evidence for antiplatelet therapy post-ACS in patients treated with PCI.

GENERAL RECOMMENDATIONS for ACS AND PCI

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Antiplatelet Therapy for Secondary Prevention in the First Year Following PCI: ACS AND PCI

1. We recommend that for patients who are compliant with clopidogrel and have experienced stent thrombosis, prasugrel 10 mg daily or ticagrelor 90 mg twice daily may be considered in addition to ASA 81 mg daily

   (Strong Recommendation, Low Quality Evidence)

   (New)

New

2. We suggest continuation of a $P2Y_{12}$ inhibitor with ASA beyond 12 months be considered in patients with a high thrombosis risk and a low bleeding risk

   (Weak Recommendation, Low Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Antiplatelet Therapy for Secondary Prevention in the First Year Following PCI: ACS AND PCI

3. We suggest that if patients require surgery (CABG or non-CABG), the $P2Y_{12}$ inhibitor be withheld, if possible, as follows: clopidogrel 5 days prior, ticagrelor 5 days prior, and prasugrel 7 days prior to the date of surgery (Weak Recommendation, Low Quality Evidence)

   (New)

New

4. We suggest against switching the $P2Y_{12}$ inhibitor initially selected at discharge unless there is a compelling clinical reason (e.g. stent thrombosis, bleeding, or cardiovascular event)

   (Weak Recommendation, Very Low Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy Regimen Following Coronary Artery Bypass Grafting

RECOMMENDATIONS

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Antiplatelet Therapy Regimen Following Coronary Artery Bypass Grafting

1. We recommend ASA 81 mg daily indefinitely in patients who undergo CABG with or without use of a saphenous vein graft

   (Strong Recommendation, Moderate Quality Evidence)

   (Unchanged)
2. We suggest the use of clopidogrel 75 daily indefinitely in patients undergoing CABG who are intolerant of ASA with or without use of saphenous vein graft

   (Weak Recommendation, Low Quality Evidence) (Unchanged)

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Antiplatelet Therapy Regimen Following Coronary Artery Bypass Grafting

3. We recommend that in patients with ACS requiring CABG, the risk of bleeding versus the benefit of continuing dual antiplatelet therapy be weighed in deciding the appropriate timing of intervention

   (Strong Recommendation, Low Quality Evidence)

   (New)

New

4. We suggest that if possible in patients scheduled for CABG, clopidogrel and ticagrelor be discontinued for 5 days and prasugrel for 7 days before surgery

   (Weak Recommendation, Low Quality Evidence)

   (New)

New

5. We recommend that DAPT be continued for 12 months in patients with ACS after CABG

   (Strong Recommendation, Moderate Quality Evidence).

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Antiplatelet Therapy Regimen Following Coronary Artery Bypass Grafting

Practical Tips

In stable patients with ACS without critical coronary anatomy who are clinically stabilized, clopidogrel and ticagrelor should be withheld for 5 days and prasugrel for 7 days before CABG. In patients with ACS, DAPT should be restarted at maintenance dose within 48-72 hours post-operatively when deemed safe by the cardiac surgical team.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Change in Philosophy in Antiplatelet Therapy for ACS: 2012

- Choice of antiplatelet agent dependent on treatment modality
  - Medical: clopidogrel or ticagrelor
  - PCI: ticagrelor or prasugrel preferred over clopidogrel
  - CABG: clopidogrel or ticagrelor
  - Elective, non-ACS: clopidogrel

- Recommendation is for DAPT for *1 year* for all ACS patients whether they are treated medically, with PCI (BMS OR DES) or with CABG

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Novel Oral Anticoagulants and Antiplatelet Therapy for the Secondary Prevention Following ACS

RECOMMENDATIONS

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Novel Oral Anticoagulants and Antiplatelet Therapy for Secondary Prevention Following ACS

1. We recommend against the use of triple therapy with rivaroxaban, clopidogrel and ASA over the use of dual therapy with ticagrelor or prasugrel plus ASA for secondary prevention of ACS

   (Weak Recommendation, Very Low Quality Evidence)

   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Novel Oral Anticoagulants and Antiplatelet Therapy for Secondary Prevention Following ACS

Practical Tip

There may be patients in whom combining an oral anticoagulant with DAPT is warranted, such as patients with atrial fibrillation or a mechanical heart valve who develop ACS. Attention is needed to monitor and minimize the duration of "triple antithrombotic therapy" given the high risk for bleeding associated with such treatment.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Novel Oral Anticoagulants and Antiplatelet Therapy for Secondary Prevention Following ACS

2. We recommend against the use of dabigatran and apixaban at any dose in combination with antiplatelet therapy for secondary prevention of ACS
   (Strong Recommendation, High Quality Evidence)
   (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Interaction between Clopidogrel and Proton Pump Inhibitors

RECOMMENDATIONS

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Interaction between Clopidogrel and Proton Pump Inhibitors

1. We recommend selective use of PPIs in patients receiving DAPT at high risk of upper gastrointestinal bleeding (Strong Recommendation, Moderate Quality Evidence). (New)

New

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Interaction between Clopidogrel and Proton Pump Inhibitors

2. We suggest that prescribing a PPI that minimally inhibits CYP2C19 (e.g. pantoprazole) be considered in patients receiving a PPI with clopidogrel (Weak Recommendation, Low Quality Evidence). (Unchanged)

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

New

Interaction between Clopidogrel and Proton Pump Inhibitors

Practical Tip

PPIs should not be used routinely in all patients taking DAPT but should be considered in patients at higher risk of gastrointestinal bleeding.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

2012 Focused Update on the Canadian Cardiovascular Society Guidelines for the use of Antiplatelet Therapy

GUIDELINE PEARLS

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Primary Prevention

DO	DON'T
Consider ASA **only** where there is clear evidence of high risk. • Asymptomatic carotid stenosis • Asymptomatic coronary atherosclerosis • Endstage CKD • Reduced ABI	Use antiplatelet therapy for primary prevention.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Cerebrovascular disease

DO	DON'T
Provide lifetime antiplatelet Rx to all patients post ischemic stroke or TIA. Consider DAPT with ASA + Clopidogrel in patients with high risk TIA or minor stroke for 30 days.	Use DAPT with ASA + Clopidogrel for long term secondary stroke prevention.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

ACS / PCI

DO	DON'T
Provide lifetime antiplatelet Rx to all patients post ACS with or without PCI. Provide DAPT with ASA + P2Y12 inhibitor to all ACS patients. Know the type of stent your patient has inserted. Consider DAPT beyond 1 year in patients with high risk of thrombosis and low risk of bleeding.	Use doses of ASA above 81 mg. Discontinue DAPT prior to 1 yr without a very good reason. EVER discontinue DAPT in a patient with a Drug Eluting Stent prior to 1 yr, EVER (without a cardiology consult)

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Management of patients post ACS who require surgery, diagnostic or dental procedures

DO	DON'T
Delay such procedures in patients taking DAPT. Stop clopidogrel for 7-10 days prior **if it can be done so safely.** Stop ASA for 7 – 10 days for bleeding high risk surgical procedures.	Discontinue DAPT prior to 1 year in patients with Drug Eluting Stents EVER (without a cardiology consult) Stop ASA for minor procedures including: • Arthrocentesis • Dental procedures • Cataract surgery • Skin excisions

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Minor Bleeding Management

DO	DON'T
If persistent check: • Complete blood count • INR and activated Partial Thromboplastin Time (aPTT)	Stop antiplatelet therapy for: • Eccymosis • Petechia • Subconjunctival hemorrhage • Epistaxis • Dental / gingival bleeding

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Drug Interactions

DO	DON'T
Use Coxibs over traditional NSAIDs in patients taking ASA for CV prevention **but only if absolutely necessary.**	Use PPI's that inhibit CYP2C19 in patients taking clopidogrel or prasugrel. Use NSAIDs or Coxibs in patients at increased risk of vascular events.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

2012 Focused Update on the Canadian Cardiovascular Society Guidelines for the use of Antiplatelet Therapy

DRUG SUMMARIES

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Drug Summaries

	Clopidogrel	Prasugrel	Ticagrelor
Requires metabolic activation through CYP2C19	Yes sensitive to polymorphisms and drug interactions	Yes but less sensitive to polymorphisms and drug interactions	
Indications	ACS, PCI, PAD, CVD	PCI	ACS, PCI
Maintenance Dosing	75 mg OD	10 mg OD	90 mg BID
Reversible Inhibition	No	No	Yes
Efficacy	++ • Further 2% ARR over ASA monotherapy	+++ • Further 2% ARR over clopidogrel + ASA	+++ • Further 2% ARR over clopidogrel + ASA
Bleeding Risk	+	+++	++
Issues	• Rash	• Bleeding risk in: Prior stroke / TIA < 60 Kg > 75 yrs • Increased fatal bleeding	• Dyspnea • Ventricular pause • Hyperuricemia • Slight increased Cr

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

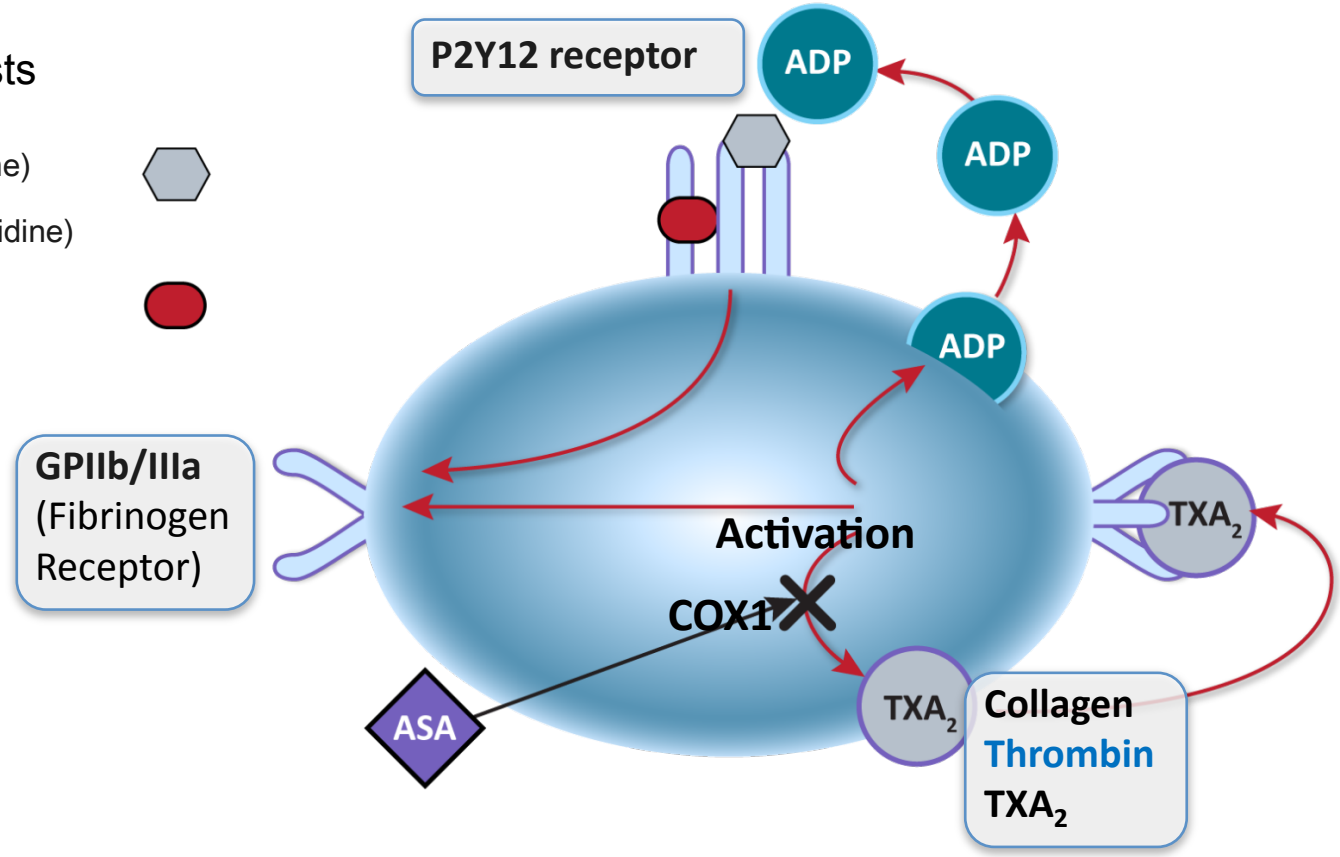
Antiplatelet Mechanisms of Action

P2Y12 Receptor Antagonists

Prasugrel (thienopyridine)

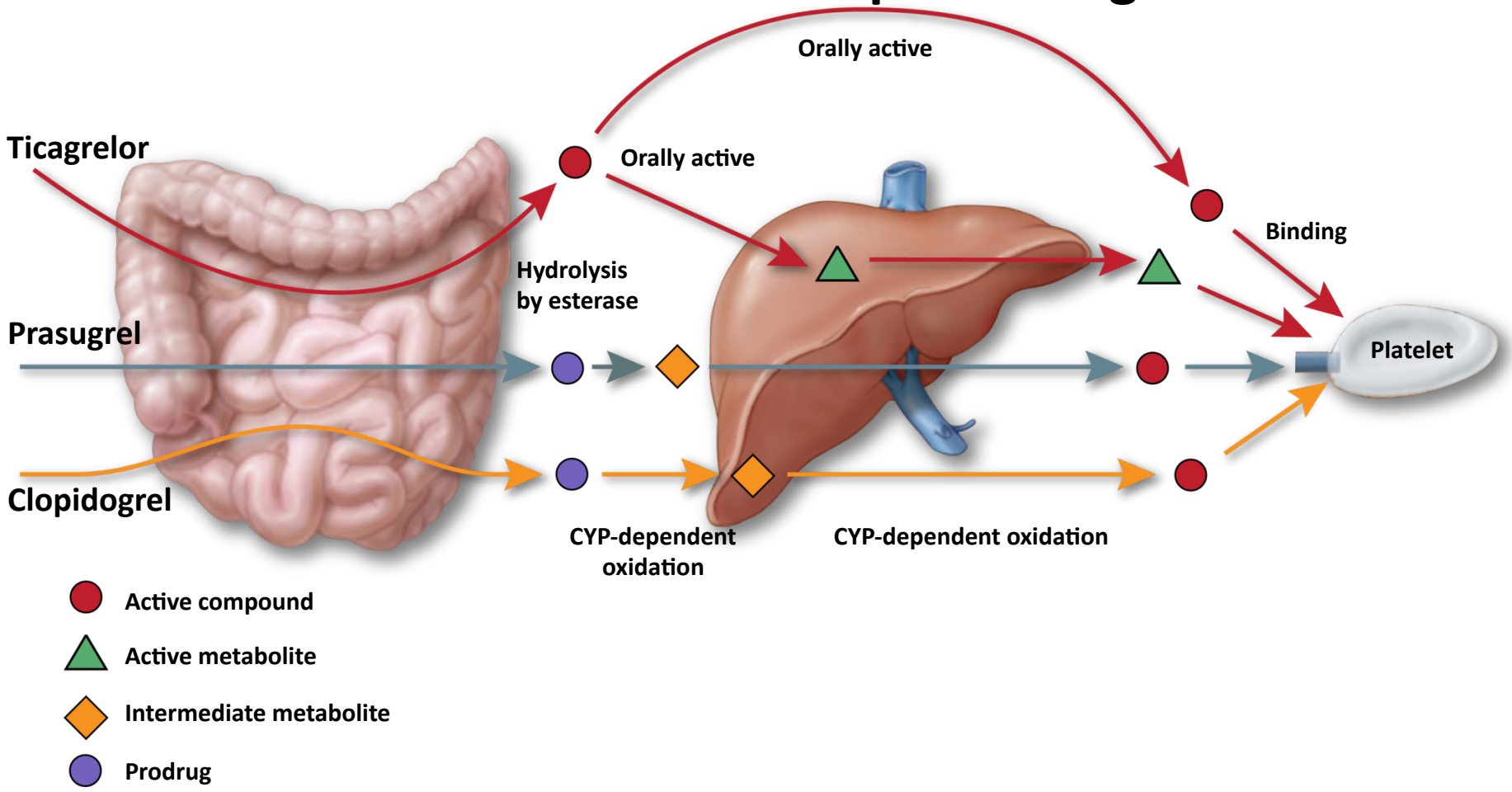
Clopidogrel (thienopyridine)

Ticagrelor (CPTP)



Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Metabolism of P2Y12 Receptor Antagonists



Adapted from: Schomig A. NEJM. 2009;361(11):1108-1111. Effient (Prasugrel) Product Monograph March 11, 2011 version. Brilinta (Ticagrelor) Product Monograph May 26, 2011 version. Plavix (Clopidogrel) Product Monograph May 9, 2011 version.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

2012 Focused Update on the Canadian Cardiovascular Society Guidelines for the use of Antiplatelet Therapy

CASES

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 1: Mr. Smith

- 63 yo male office worker presents complaining of shortness of breath intermittently since hospital discharge following heart attack 3 weeks ago
  - Describes intermittent feeling of breathless usually at rest
  - Not associated with:
    - Chest pain, palpitations, nausea/vomiting, ankle swelling, cough or wheeze
  - Able to continue with usual activities
  - Physical exam – normal

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 1: Mr. Smith

- NSTEMI 3 weeks prior to current visit
  - Managed with percutaneous intervention
  - Drug eluting stents x 2
  - Discharged after 3 days with uneventful course and preserved LV function
- Comorbid conditions
  - Hypertension
  - Hyperlipidemia
- Current meds
  - ECASA 81 mg OD
  - Ticagrelor 90 mg BID
  - Metoprolol 50 mg BID
  - Rosuvastatin 20 mg OD
  - Irbesartan / HCT 300/12.5 mg OD

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 1: Mr. Smith

Which of the following are likely causes of his dyspnea?

A. Recurrent cardiac ischemia
B. Anxiety
C. Medication side effect
D. Cardiac arrhythmia
E. Pulmonary disease

All are correct but the key point is that C is a correct response

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 1: Mr. Smith

Which of the following investigations would you order?

A. EKG
B. Cardiac echo
C. Chest X ray
D. Holter monitor
E. Graded exercise stress test
F. Cardiology consult

All responses are correct.

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 2: Mr. Brown

- 67 yr old sedentary male with history of DM, HTN, high cholesterol
- Meds: ramipril, ASA, simvastatin, metformin
- Presents with new onset crescendo typical CP x 3 days culminating in rest pain
- No bleeding diathesis
- No history of TIA or stroke
- Weight: 80kg
- Exam: BP 150/85, HR 80 (sinus). No CHF; +S4 otherwise normal

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 2: Mr. Brown

- Normal CBC, electrolytes
- Creatinine: 112 mmol/L
- Troponin I: 1.2 µg/L (4th generation assay)
- ECG: NSR, 1mm horizontal ST depression V1-V3
- CXR: normal (no CHF)
- Admitted with Dx of high risk Non-ST Elevation Acute Coronary Syndrome (NSTEACS)
- Undergoes coronary angiography and subsequent drug eluting stent implantation

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 2: Mr. Brown

Which discharge antiplatelet regimens are preferred following NSTEACS and coronary stent?

1. ASA + Clopidogrel
2. ASA + Ticagrelor 
3. ASA + Prasugrel 
4. Any of the above
5. None of the above

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 2: Mr. Brown

How long should this patient receive dual antiplatelet therapy?

1.1 month
2.3 months
3.6 months
4.1 year 
5.Indefinite

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 2: Mr. Brown

What if he had instead received a BMS?

1. Same as with a drug eluting stent 
2. Shorter than with a drug eluting stent
3. Longer than with a drug eluting stent

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 3: Mr. Sanchez

- 56 year old man, stable CCS 3 angina referred for elective PCI after trial of medical therapy
- Cath: 80% mid RCA lesion; stented with 1 x DES (everolimus eluting stent)

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 3: Mr. Sanchez

For elective PCI, the duration of dual anti platelet therapy should be:

1. Same duration as following ACS 
2. Shorter duration than following ACS
3. Longer duration as following ACS

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 3: Mr. Sanchez

Which discharge antiplatelet regimens are preferred following elective coronary stenting?

1. ASA + Clopidogrel 
2. ASA + Ticagrelor
3. ASA + Prasugrel
4. Any of the above
5. None of the above

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 4: Mr. Price

- 3 months after receiving a DES, your patient has to undergo prostatectomy for cancer. He has been advised to discontinue his antiplatelet therapy for the surgery
- He asks you, his family doctor, if this is safe?

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 4: Mr. Price

Your response:

1. Yes, you can interrupt the clopidogrel after 3 months post PCI but continue the ASA
2. No, you must continue clopidogrel along with ASA for a minimum of 1 year regardless of the surgery

1 is correct, however 2 is also correct if he has a 2nd generation DES (not specified)

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Case 4: Mr. Price

Your response:

What if he had received a bare metal stent?

1. Yes, you can stop the clopidogrel after 3 months post PCI but continue the ASA
2. No, you must continue clopidogrel along with ASA for a minimum of 1 year

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*

Thank you and questions

Tanguay JF, Bell AD et al. (in press), *Can J Cardiol*