

Dual Anti-platelet Therapy (DAPT) in 2019

Is aspirin giving us headaches?

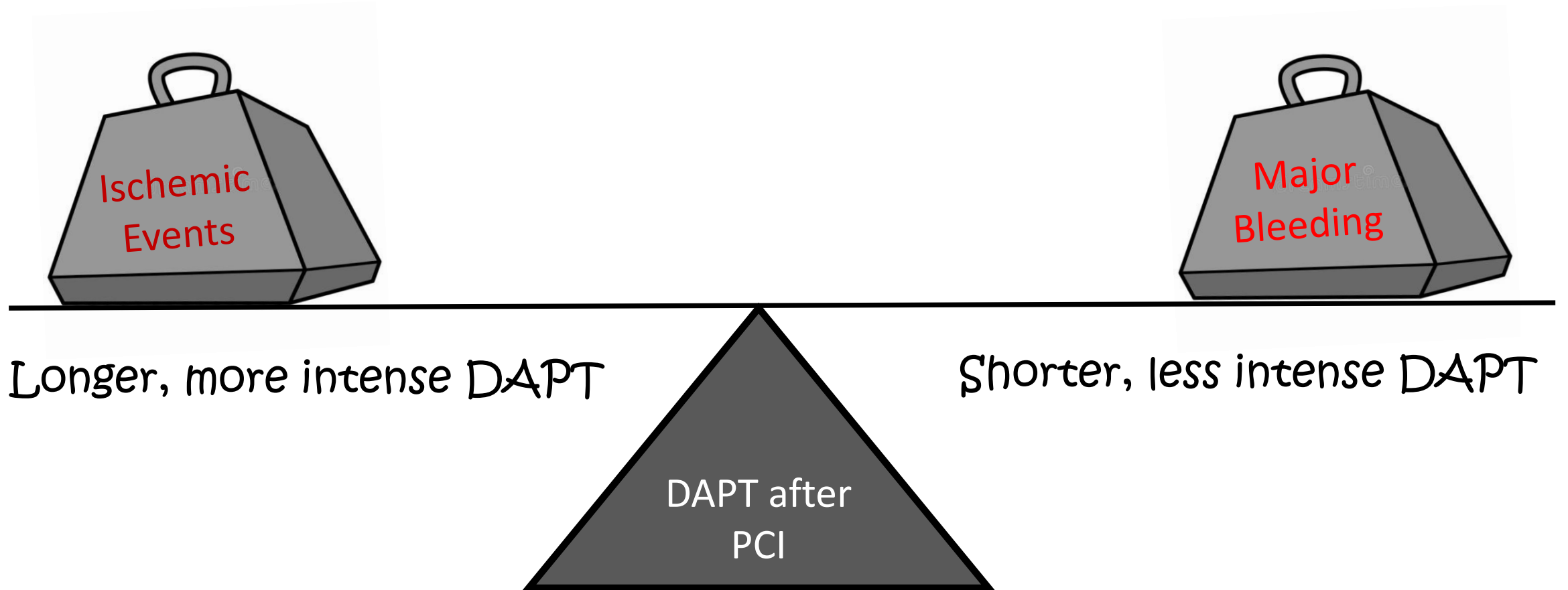
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No conflicts to disclose



Ohio
CHAPTER

A Balancing Act



Stent thrombosis and ischemic events

2016 ACC/AHA Guideline Focused Update on Duration of Dual Antiplatelet Therapy in Patients with Coronary Artery Disease. J Am Coll Cardiol 2016; 68 (10) : 1082-1115.

2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention. J Am Coll Cardiol 2011; 58 (24) : e44-e122.

- Factors that increase risk
 - Premature withdrawal of P2Y12 agent
 - Greater lesion complexity (higher SYNTAX score)
 - Greater patient complexity (smoking, diabetes, CKD, LVEF < 40%, age ≥ 75 y)
 - ACS versus stable angina setting
- Factors that decrease risk
 - Use of second generation DES (vs. BMS or first generation DES)
 - Maximal platelet inhibition at the time of DES deployment
 - Better patient compliance with GDMT
 - Optimal stent apposition

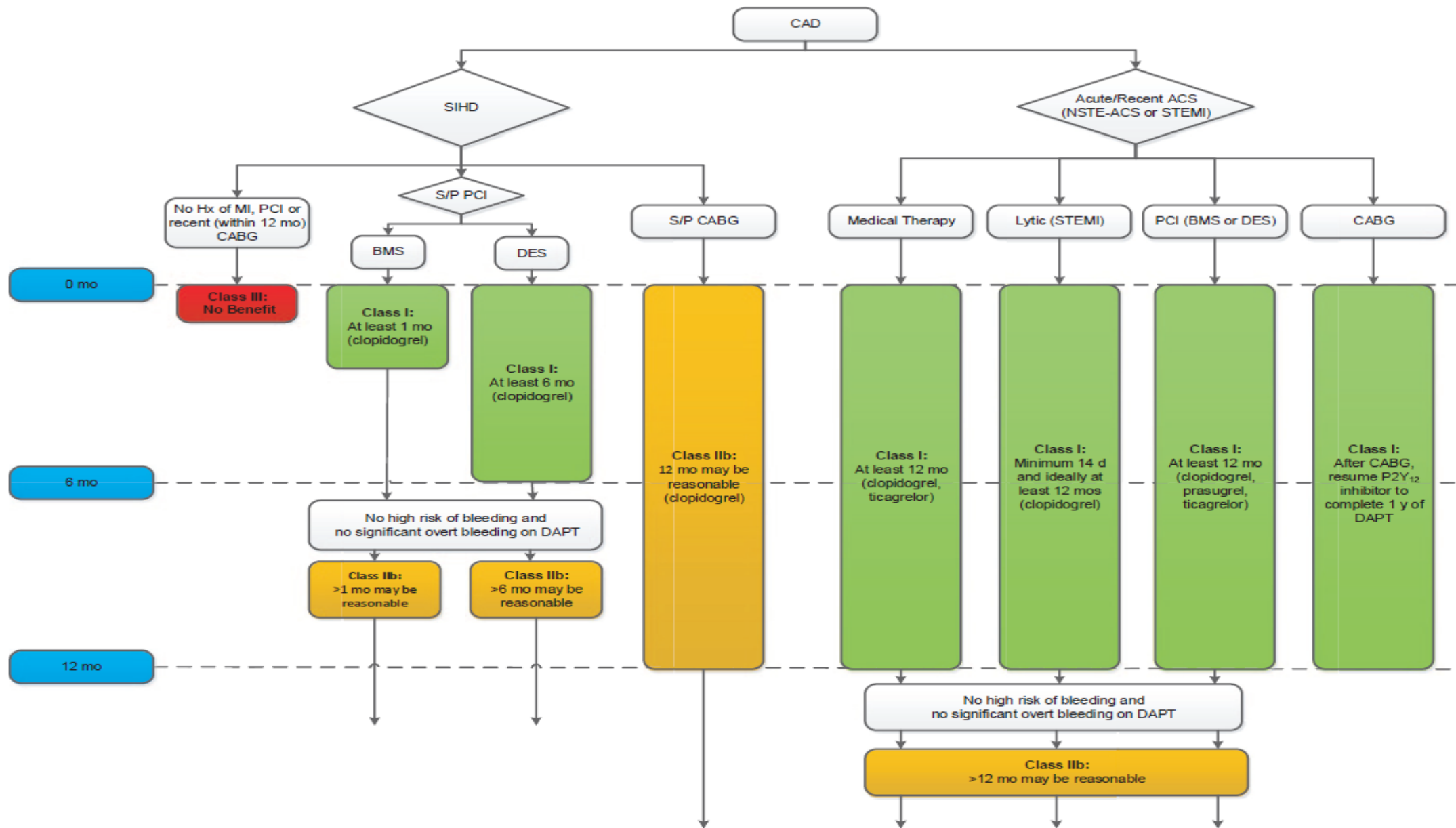
Major bleeding events

2016 ACC/AHA Guideline Focused Update on Duration of Dual Antiplatelet Therapy in Patients with Coronary Artery Disease. J Am Coll Cardiol 2016; 68 (10) : 1082-1115.

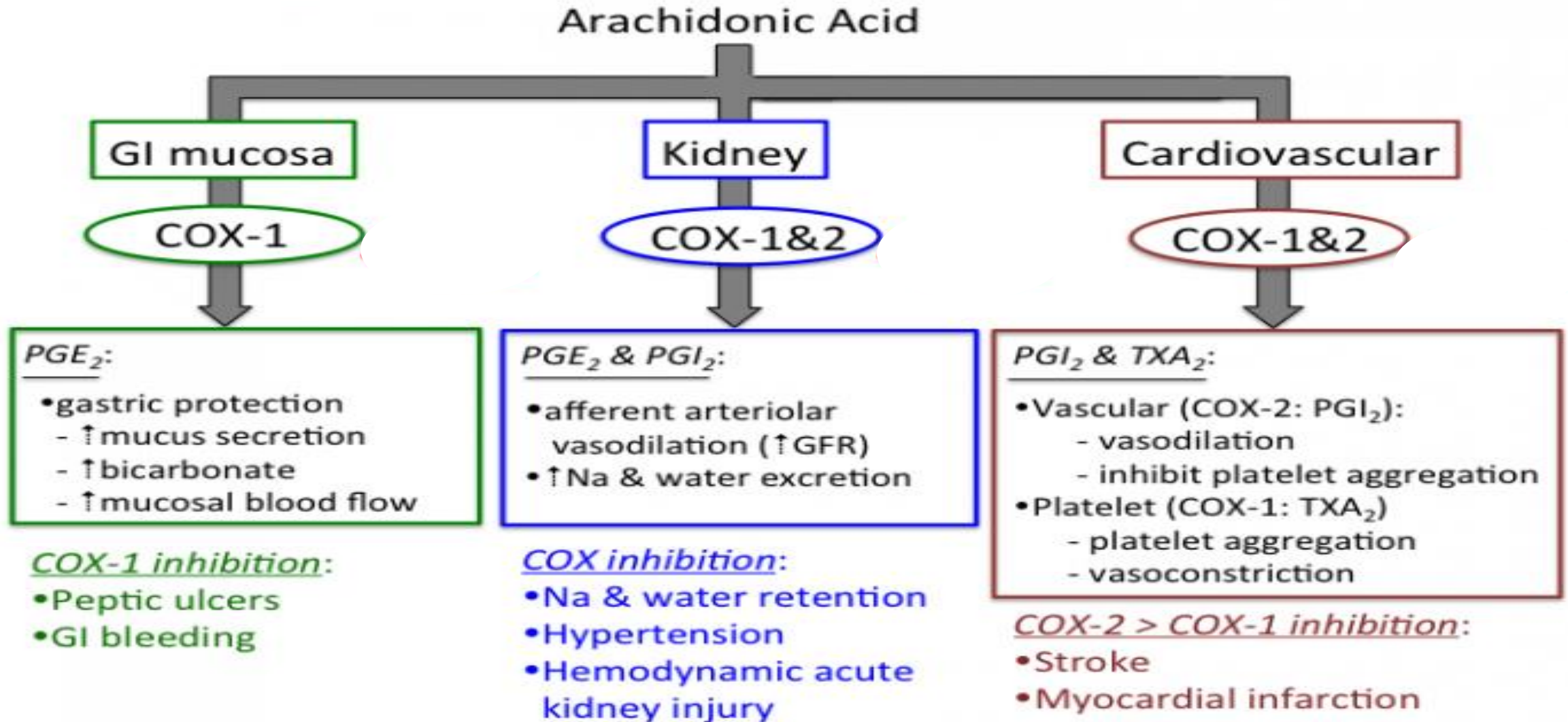
2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention. J Am Coll Cardiol 2011; 58 (24) : e44-e122.

- Factor that increase risk
 - Increased medical complexity (diabetes, CKD, liver disease, LVEF < 40%)
 - Need for concurrent anticoagulation
 - Increased bleeding risk (prior GI bleeding, chronic aspirin or steroid use)
 - Female sex
- Factors that decrease risk
 - Proton pump inhibitor use in patients at increased bleeding
 - Use of radial versus femoral arterial access
 - Age \leq 65 years
 - Normal BMI

ACC/AHA 2016 Guideline Focused Update on Duration of Dual Antiplatelet Therapy in Patients with Coronary Artery Disease
 J Am Coll Cardiol 2016; 68 (10): 1082-1115.



Aspirin Effects Beyond the Platelet



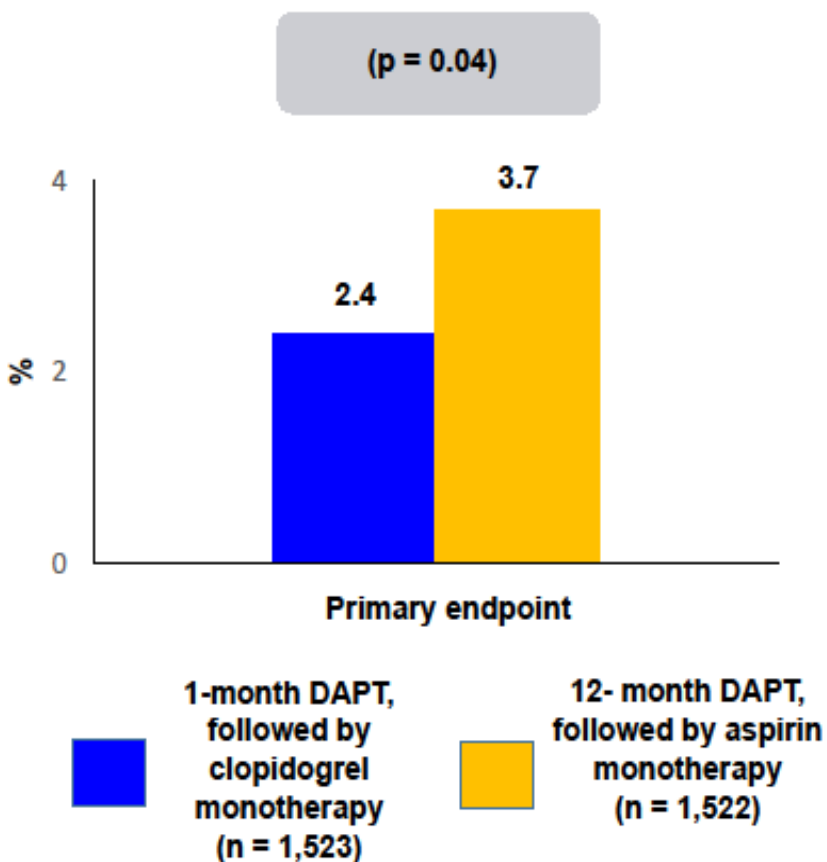
STOPDAPT-2

#ACC19



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Trial Description: Patients undergoing PCI were randomized to 1 month of DAPT followed by clopidogrel monotherapy for 5 years versus 12 months of DAPT followed by aspirin monotherapy for 5 years.



RESULTS

- Primary outcome, death, MI, stent thrombosis, stroke, TIMI major/minor bleeding at 1 year: 2.4% of 1-month DAPT group compared with 3.7% of 12-month DAPT group (p for superiority = 0.04)
- Death, MI, stent thrombosis, or stroke at 1 year: 2.0% of 1-month DAPT group compared with 2.5% of 12-month DAPT group (p for noninferiority = 0.005)

CONCLUSIONS

- Among patients undergoing PCI for stable and unstable cardiovascular disease, 1-month DAPT followed by clopidogrel monotherapy was superior to 12-month DAPT followed by aspirin monotherapy at preventing net adverse clinical events
- 1-month DAPT was noninferior to 12-month DAPT at preventing major adverse ischemic events

Presented by Dr. Hirotoshi Watanabe at ACC 2019

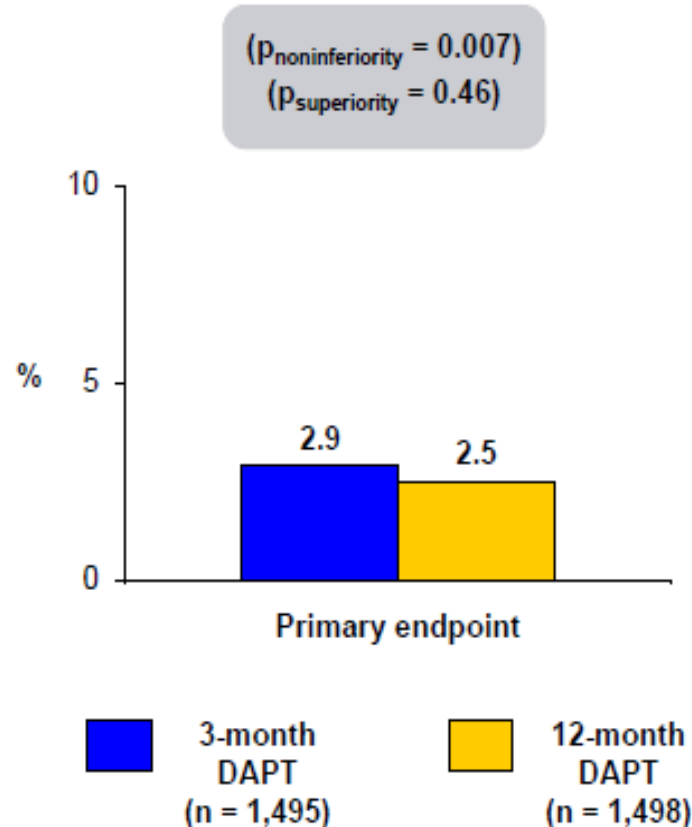
SMART-CHOICE

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Trial Description: Patients undergoing DES-PCI were randomized in a 1:1 fashion to either dual antiplatelet therapy (DAPT) for 3 months followed by P2Y12 inhibitor monotherapy for 9 months, or DAPT for 12 months. They were followed for 1 year.



RESULTS

- Primary endpoint: MACCE (death, MI, stroke) at 12 months, for 3- vs. 12-month DAPT: 2.9% vs. 2.5%, p for noninferiority = 0.007; p for superiority = 0.46
- Death: 1.4% vs. 1.2%, $p = 0.61$; MI: 0.8% vs. 1.2%, $p = 0.28$; stent thrombosis: 0.2% vs. 0.1%, $p = 0.65$
- Bleeding BARC 2-5: 2.0% vs. 3.4%, $p = 0.02$

CONCLUSIONS

- 3 months of DAPT followed by P2Y12 inhibitor use as monotherapy for 9 months is noninferior to 12 months of DAPT among unselected patients undergoing PCI with a DES; bleeding was lower with this strategy
- Interesting findings, adds to other trials seeking to drop aspirin rather than the P2Y12 inhibitor as antiplatelet agent long-term; outcomes may be different among patients with ACS vs. stable ischemic heart disease

Presented by Dr. Joo-Yong Hahn at ACC 2019

Applicability?

- Asian vs. US population?
 - BMI
 - Variance in drug metabolism
 - Health care delivery
- Stable vs. ACS patient enrollment?
- Different practice patterns?
 - Routine use of post PCI intracoronary imaging
 - Greater use of clopidogrel

Conclusions

- These studies add to the growing body of evidence supporting the safety of shorter duration DAPT therapy following PCI.
- These studies make a credible argument that post-DAPT monotherapy with a P2Y12 inhibitor (clopidogrel in particular) is as effective as aspirin monotherapy but with the possible benefit of reduced bleeding risk.