

Stroke Prevention in Atrial Fibrillation (SPAF):  
Patients with Coronary Artery Disease (CAD),  
Acute Coronary Syndromes (ACS), and/or  
Percutaneous Coronary Intervention (PCI)

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**Presenter Disclosures:**  
**L. Brent Mitchell, MD**

- Boehringer-Ingelheim
  - Consultant, Clinical Trials Funding, Speaker Honoraria, RE-LY study
- BMS-Pfizer Alliance
  - Consultant, Speaker Honoraria
- CCS Atrial Fibrillation Guidelines Panel
- Medtronic Canada
  - Research Funding, Fellowship Funding

## Antithrombotic Therapy For Those Patients With NVAf

- ASA has marginal (if any) benefit and does cause bleeding
- ASA + clopidogrel more effective, but more bleeding
- Warfarin is more effective than ASA ± clopidogrel
- NOACs have net benefits over warfarin

Cairns JA et al. Can J Cardiol 2013; 29(7 Suppl):S60-70.

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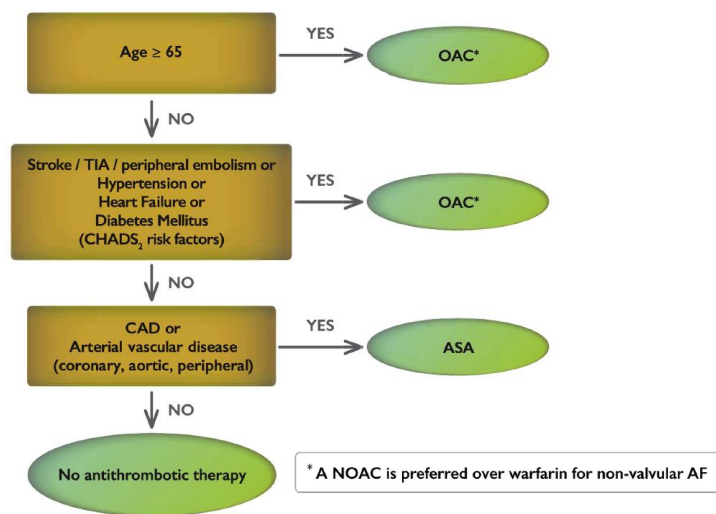


## Interactive Question 1

When presented with a NVAF patient, which risk scoring system do you use to determine whether or not to offer OAC therapy for stroke prevention?

1. CHADS<sub>2</sub> (15%)
2. CHA<sub>2</sub>DS<sub>2</sub>-VASc (18%)
3. CHADS-65 (65%)
4. HAS-BLED (1%)
5. Other (0%)

## The CCS Algorithm for OAC for SPAF in Patients with NVAF



Macle L et al. Can J Cardiol 2016; 32(10):1170-1185.

## Antithrombotic Therapy for Patients with CAD/ACS/PCI (1)



### Primary Prevention:

- ASA has net benefit if risk of CAD is  $> 1\text{-}2\%$ /year
- Low intensity warfarin is as effective but is more difficult
- ASA and warfarin more effective but cause more bleeding
- Clopidogrel and ASA no better than ASA
- No information regarding other therapies including NOACs
- No information regarding other comparisons of therapies

Cairns JA et al. Can J Cardiol 2013; 29(7 Suppl):S60-70.

## Antithrombotic Therapy for Patients with CAD/ACS/PCI (2)



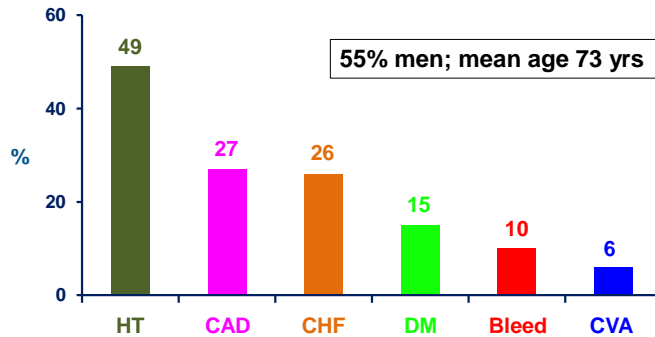
### Secondary Prevention:

- ASA has net benefit in patients with known CAD
- Clopidogrel used for stable CAD patients with ASA allergy
- Warfarin is likely as effective as ASA, but is more difficult
- ASA + thienopyridine (DAPT) adds net benefit in high risk patients:
  - for 1 year after ACS
  - for  $\geq 1$  months after bare metal stent
  - for  $\geq 3\text{-}12$  months after drug-eluting stent
- Warfarin only for patients with particularly high risk of thrombosis

Cairns JA et al. Can J Cardiol 2013; 29(7 Suppl):S60-70.

## Distribution of Co-Morbidities in Patients with NVAf

- Administrative database review of Kaiser Permanente
- 13,559 NVAf patients identified in 1996 and 1997



Singer DE et al. Ann Intern Med 2009; 151(5):297-305.

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## Interactive Question 2

In an average NVAF patient treated with low-dose ASA for stroke prevention, the risk of a major hemorrhage is:

1. 0.1% per year (6%)
2. 0.2% per year (14%)
3. 0.5% per year (27%)
4. 1.0% per year (43%)
5. 2.0% per year (10%)



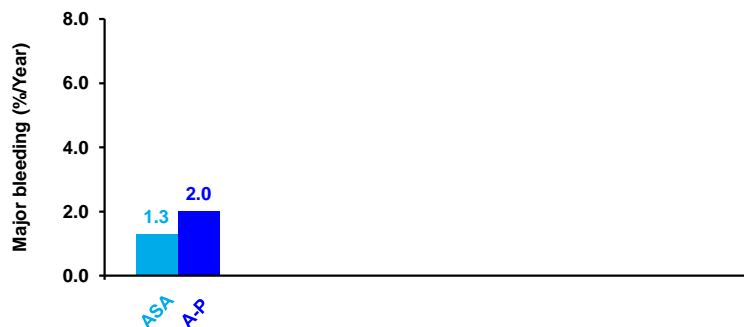
## Interactive Question 3

In an average NVAF patient treated with an OAC for stroke prevention, the risk of a major hemorrhage while receiving triple therapy is:

1. 0.4% per year (0%)
2. 0.8% per year (1%)
3. 1.6% per year (9%)
4. 3.2% per year (49%)
5. 6.4% per year (41%)

## Annual Rates of Major Bleeding in NVAF by OAC Use (1)

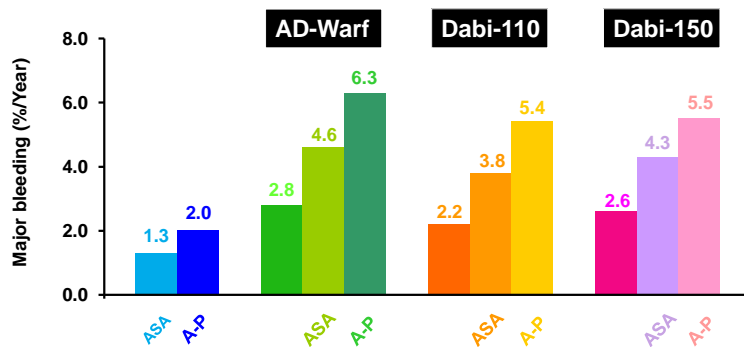
- Observational data from ACTIVE (7,554) and RE-LY (18,113)
- In ACTIVE analysis: 58% men; mean age 71 years



Active Investigators. N Engl J Med 2009; 360(20):2066-78.

## Annual Rates of Major Bleeding in NVAF by OAC Use (2)

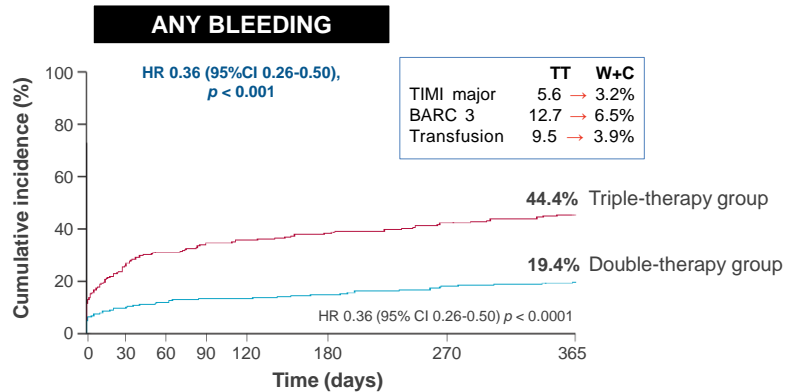
- Observational data from ACTIVE (7,554) and RE-LY (18,113)
- In RE-LY analysis: 52% men; mean age 71 years



Active Investigators. N Engl J Med 2009; 360(20):2066-78. Dans AL et al. Circulation 2013; 127(5):634-40.

## WOEST (1)

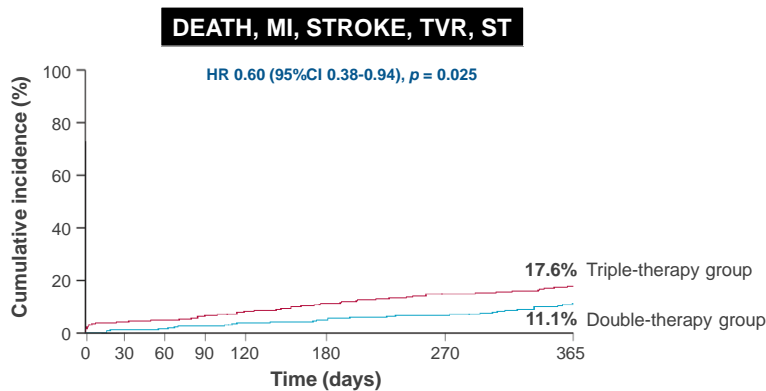
- 573 patients on warfarin therapy (69% with AF) for elective PCI
- RCT: warfarin/clopidogrel/ASA (TT) vs. warfarin/clopidogrel



Dewilde W et al. Lancet 2013; 381(9872):1107-15.

## WOEST (2)

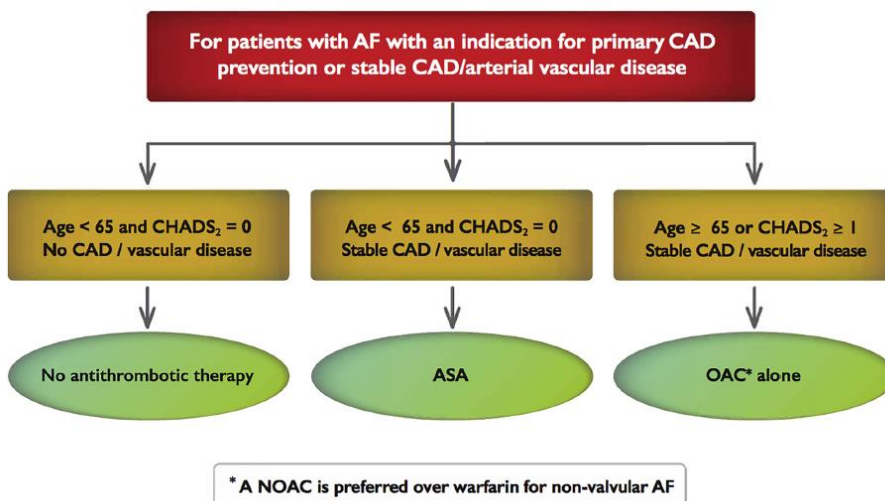
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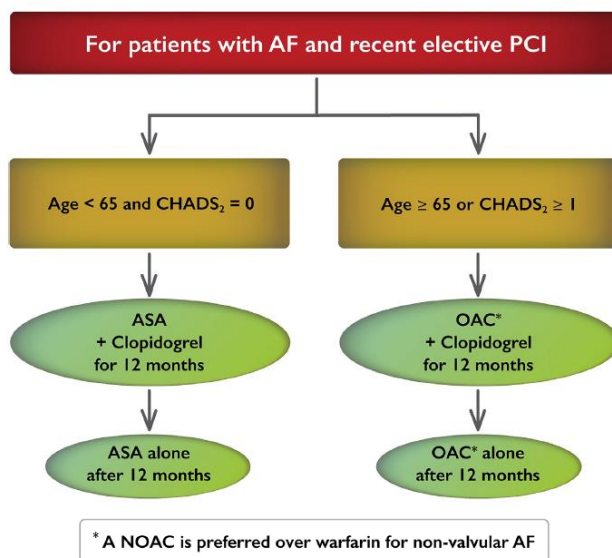


## SPAF in Patients with Stable Coronary Disease



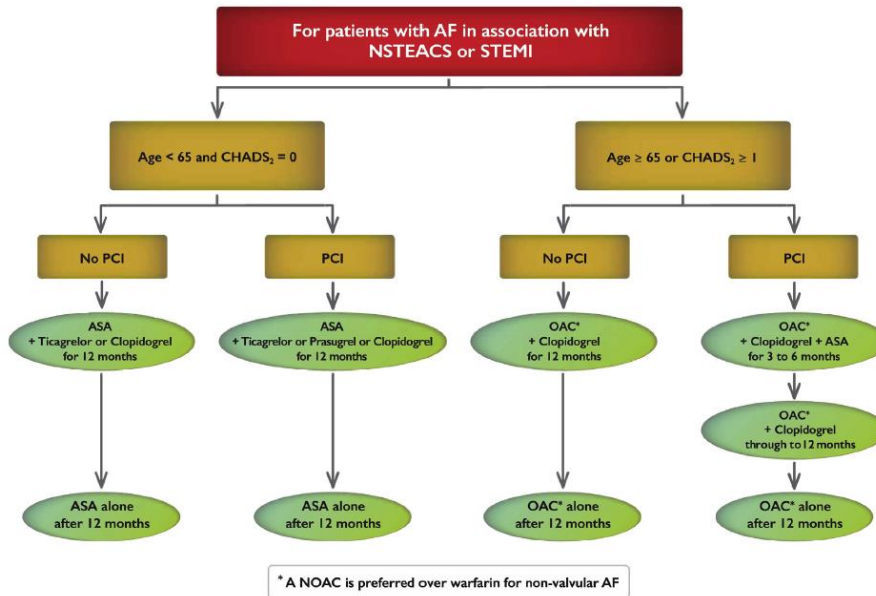
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## SPAF in Patients With Recent Elective PCI



Macle L et al. Can J Cardiol 2016; 32(10):1170-1185.

## SPAF in Patients with NSTEMI/STEMI



Macle L et al. Can J Cardiol 2016; 32(10):1170-1185.



## CONCLUSIONS: SPAF in Patients with NSTEMI/STEMI

- Evaluate the patient for risk of stroke – CHADS-65, CHA<sub>2</sub>DS<sub>2</sub>-VASC
- Evaluate the patient for risk of bleeding – HAS-BLED
- Evaluate the patient for risk of coronary event/stent thrombosis
- Choice of stent: BMS > newest generation DES > older DES
- Minimize duration of double- or triple-antithrombotic Rx

Cairns JA et al. Can J Cardiol 2013; 29(7 Suppl):S60-70.



## **CONCLUSIONS: SPAF in Patients with NSTEMACS/STEMI**

- Triple-antithrombotic Rx with OAC – use clopidogrel
- OAC can be NOAC or warfarin (although CCS prefers NOAC)
- If warfarin in triple-antithrombotic Rx, consider INR 2.0-2.5
- If NOAC in triple-antithrombotic Rx, consider lower dose
- Consider PPI therapy during double- or triple-antithrombotic Rx

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