

# Audience Response and Q&A System Instructions

- On your phone or tablet via the AHA app
  - Locate and open the session
  - Tap or click “Polling/Social Q&A” button



Polling/Q&A



- On your phone, tablet or laptop via web browser
  - URL: [aha2019.cnf.io](https://aha2019.cnf.io)
  - Locate and open the session

Polls will appear on your device when speakers activate slides containing ARS questions.



# **Ticagrelor with Aspirin or Alone in High-Risk Patients after Coronary Intervention for ACS**

**- Discussant -**

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Associate Professor, Harvard Medical School  
CV Division, Brigham and Women's Hospital**

# Audience Response Question

**Q: What is your current practice regarding use of DAPT for patients who are stented in the setting of ACS?** (in absence of known need for anticoagulation)

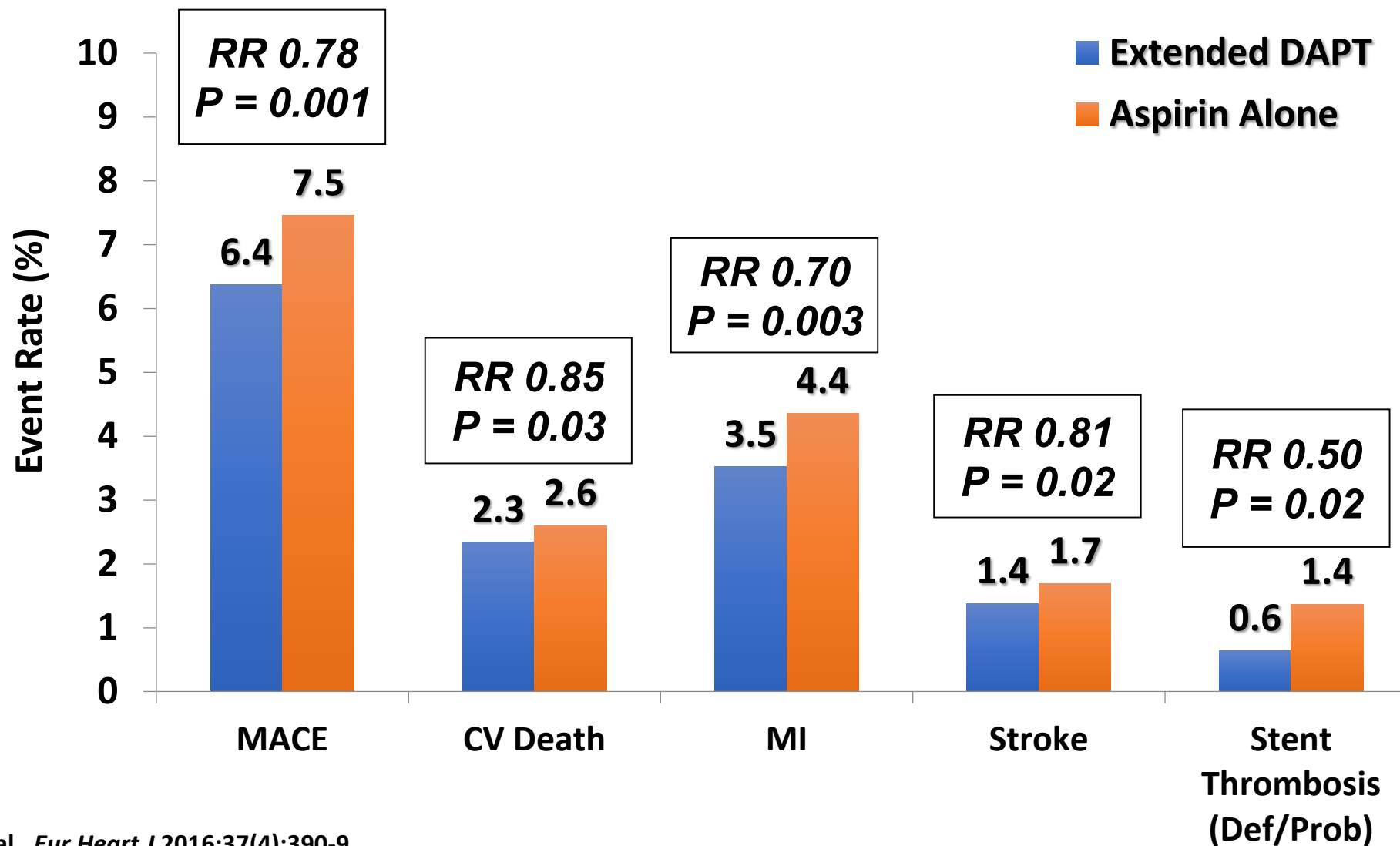
- a) Indefinite use of both ASA and P2Y12 inhibitor
- b) Indefinite use of ASA and discontinue P2Y12 inhibitor after 12 months
- c) Indefinite use of ASA and discontinue P2Y12 inhibitor after 3-12 months
- d) Discontinue ASA after 1-3 months in all patients and continue ticagrelor or prasugrel alone
- e) Discontinue ASA after 1-3 months in all patients and continue clopidogrel alone
- f) Discontinue ASA after 1-3 months only in patients at high bleeding risk and continue P2Y12i

***Live Content Slide***

*When playing as a slideshow, this slide will display live content*

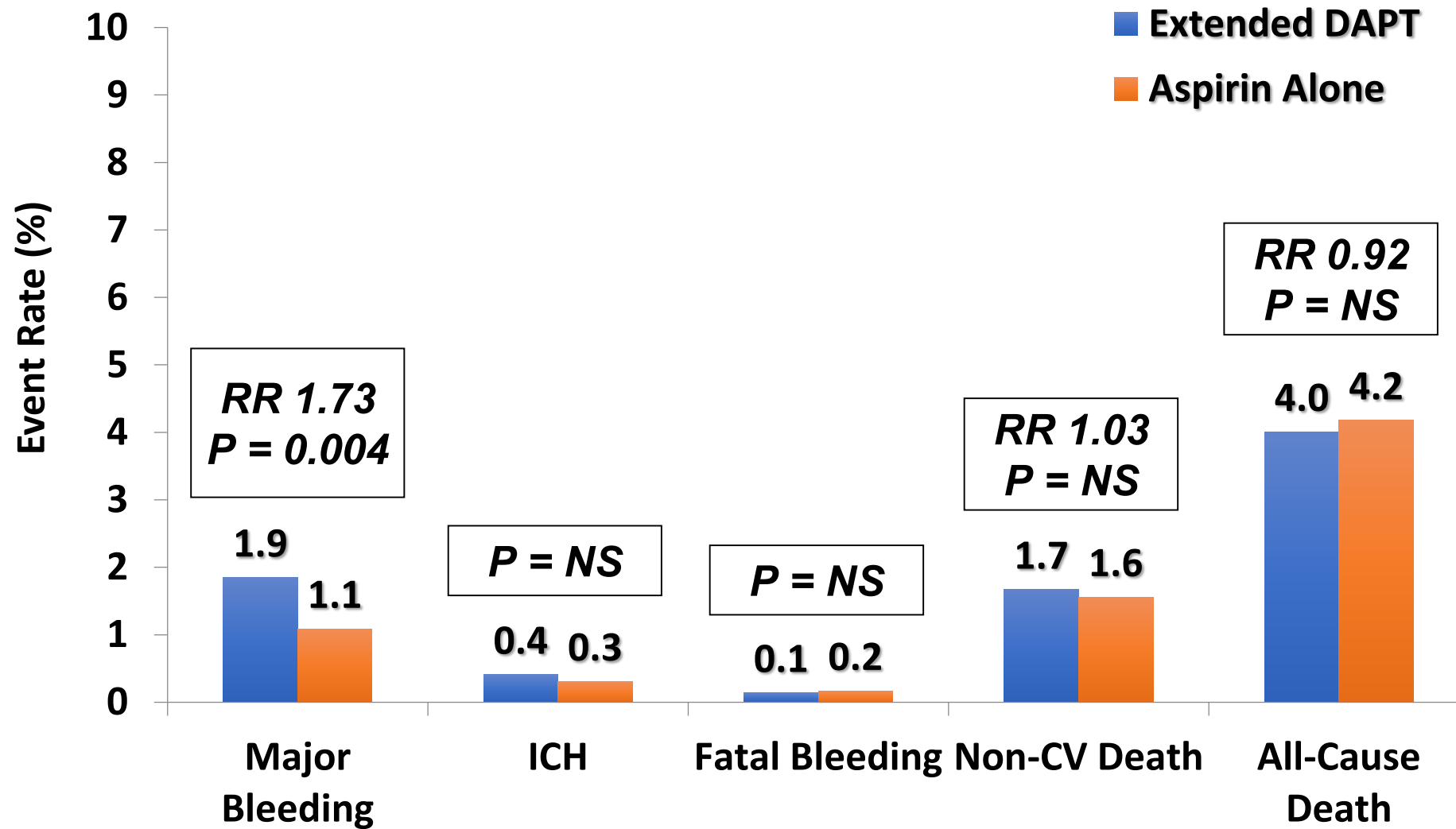
**Poll: Q: What is your current practice regarding use of DAPT for patients who are stented in the setting of ACS? (in absence of known need for anticoagulation)**

# More Prolonged DAPT Reduces Ischemic Events Post MI



Udell JA, Bonaca MP et al. *Eur Heart J* 2016;37(4):390-9.

# More Prolonged DAPT Increases Risk of Bleeding

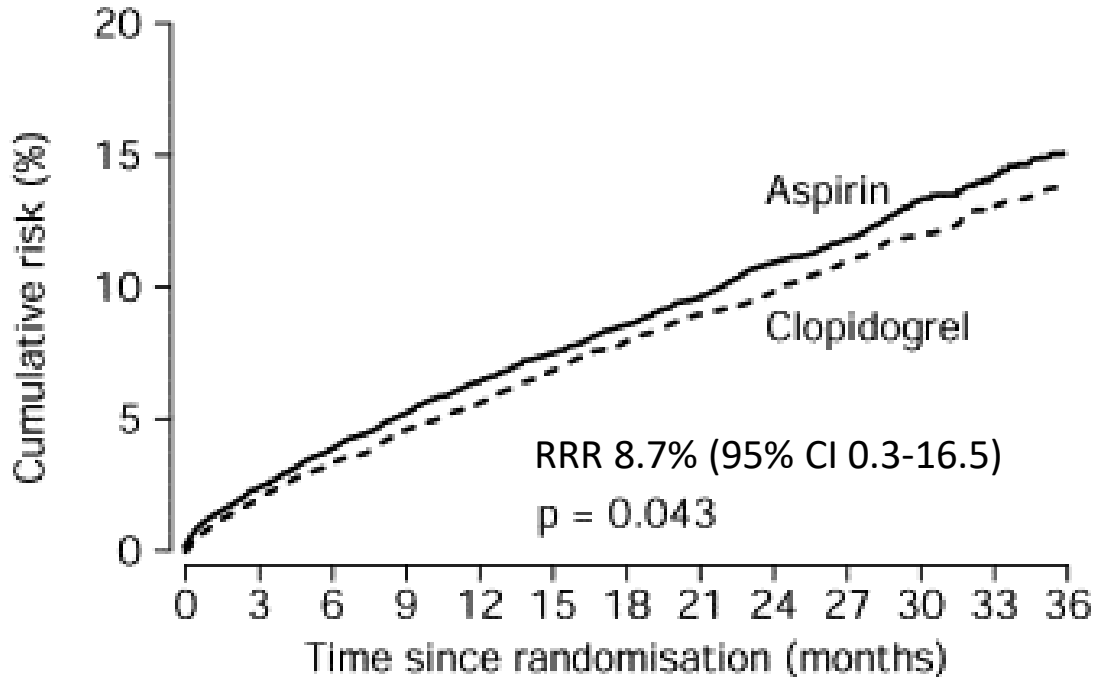


Udell JA, Bonaca MP et al. *Eur Heart J* 2016;37(4):390-9.

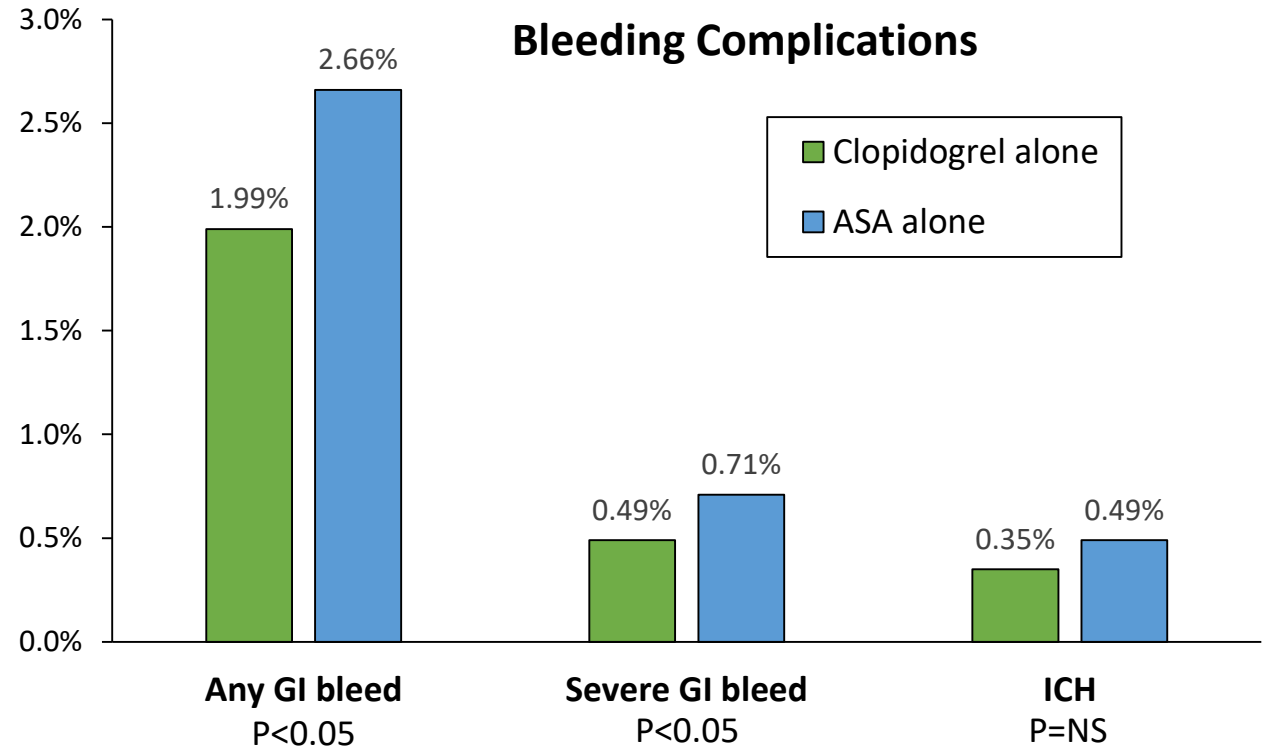
# Aspirin vs Clopidogrel: Evidence to Date

CAPRIE: 19,185 patients with recent stroke, MI or symptomatic PAD

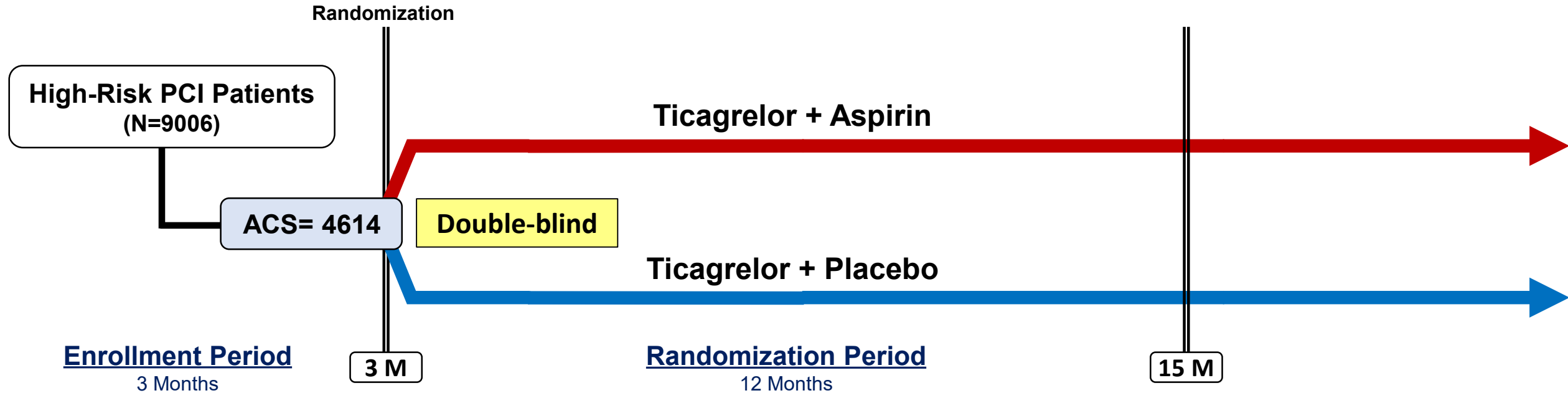
### Vascular death, MI or ischemic stroke



### Bleeding Complications



# TWILIGHT-ACS: Study Design



## Key Features

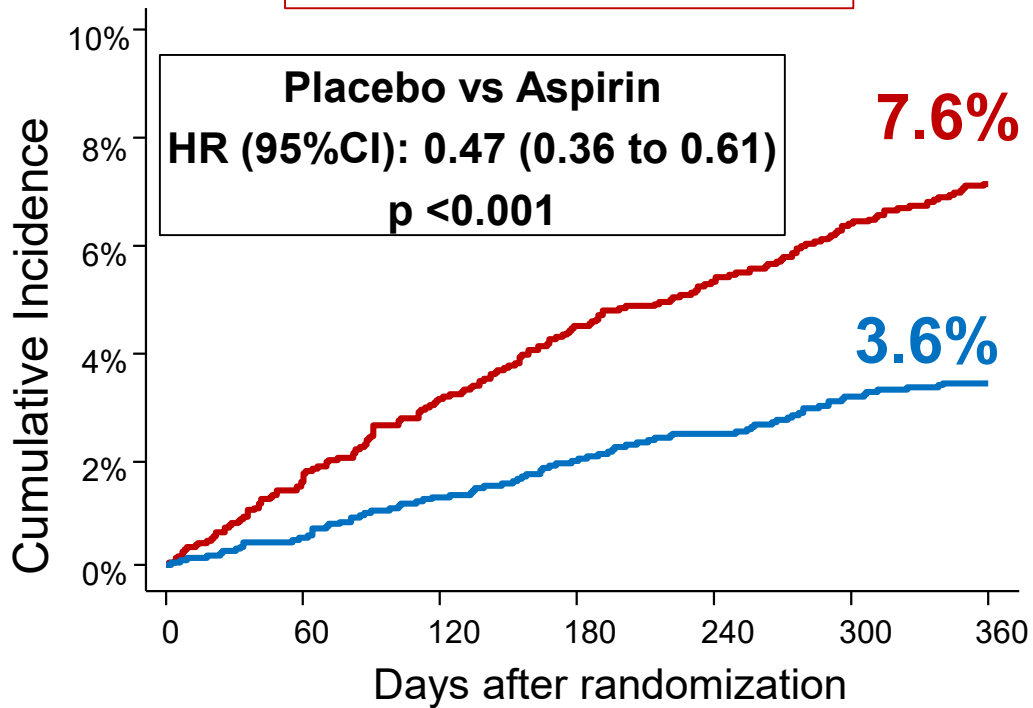
- Current analysis restricted to ACS cohort (65% of randomized pts)
- All patients required to have  $\geq 1$  high-risk clinical and angiographic feature
- $\geq 50\%$  had  $\geq 4$  high-risk clinical or angiographic features (including 35% DM, 61% w/ multi-vessel dz); STEMI excluded
- Comparable adherence between Rx arms



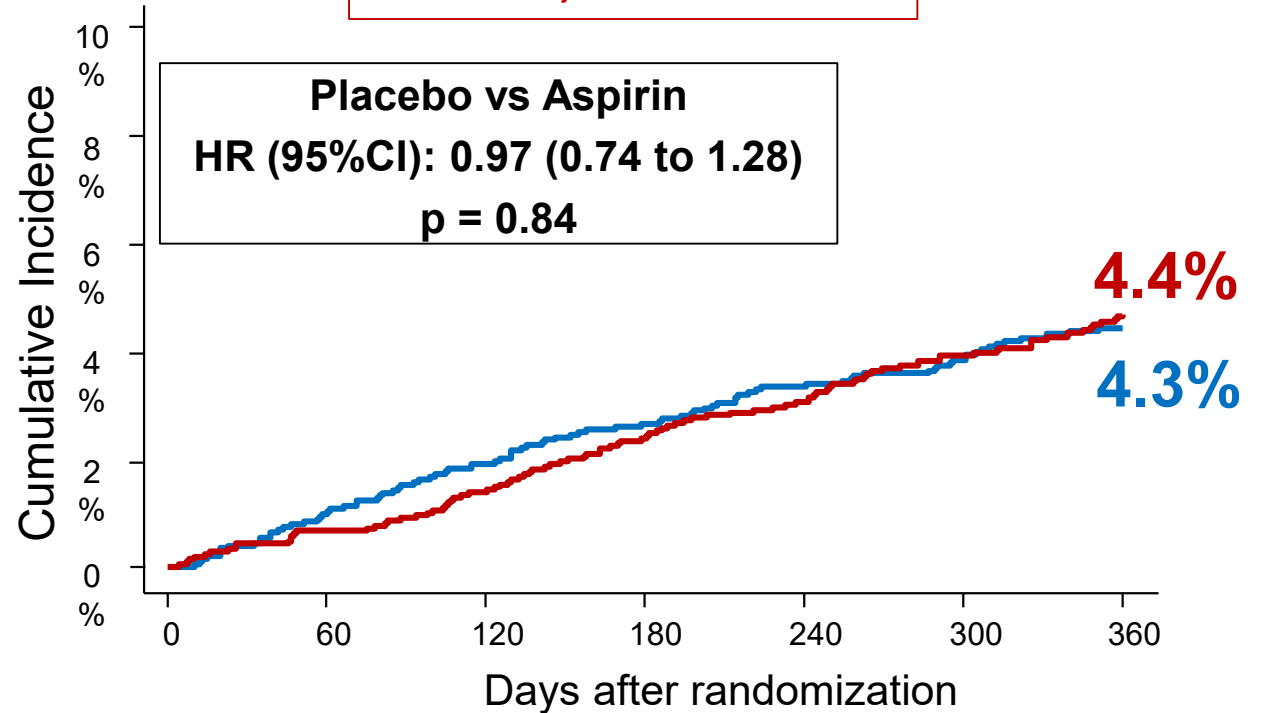
# TWILIGHT-ACS: Primary Results

- Ticagrelor + Placebo
- Ticagrelor + Aspirin

BARC 2,3 or 5 Bleeding



Death, MI or stroke



Baber et al., AHA Scientific Sessions 2019

# P2Y12 Monotherapy vs DAPT: Evidence to Date

## GLOBAL LEADERS

- Open label, 18 countries
- 15,968 pts w/ ACS (47%) or stable CAD post DES
- Experimental arm: Ticagrelor monotherapy post M1
- Control arm: Clopi (stable CAD) or ticagrelor (ACS) x12mos + ASA 75-100mg

## SMART-CHOICE

- Open label, 33 sites in Korea
- 2993 pts w/ ACS (58%) or stable CAD post DES
- Experimental arm: ASA discontinued at M3 then any P2Y12 inhibitor monotherapy
- Control arm: Any P2Y12 inhibitor + ASA

## STOPDAPT-2

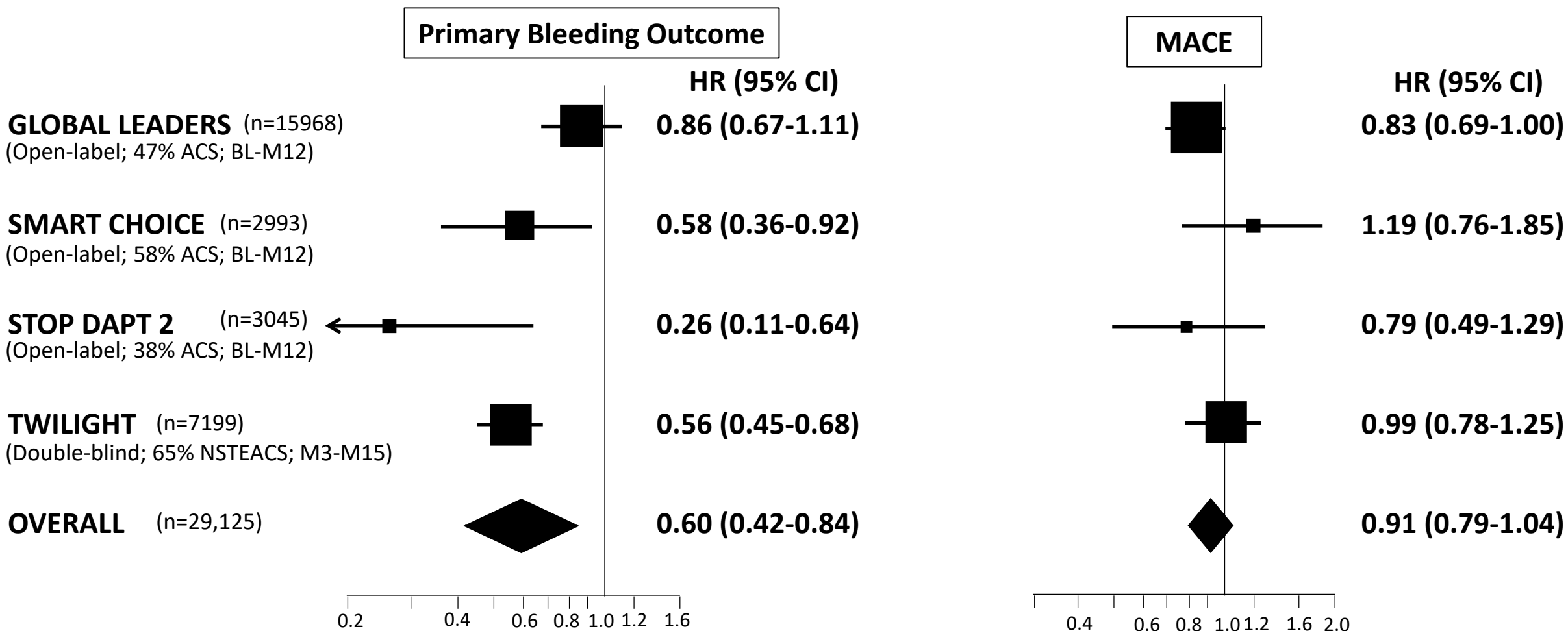
- Open label, 90 sites in Japan
- 3045 pts w/ ACS (38%) or stable CAD post DES
- Experimental arm: Clopidogrel monotherapy post M1
- Control arm: Clopidogrel + ASA

## twilight

- Double-blind, 11 countries
- 7119 pts w/ NSTEMI (65%) or stable CAD post DES
- Experimental arm: Ticagrelor monotherapy post M3
- Control arm: Ticagrelor + ASA

Vranckx et al., *Lancet* 2018;392:940; Hahn et al., *JAMA* 2019;321:2428; Watanabe et al., *JAMA* 2019;321:2414; Mehran et al., *NEJM* 2019:epub.

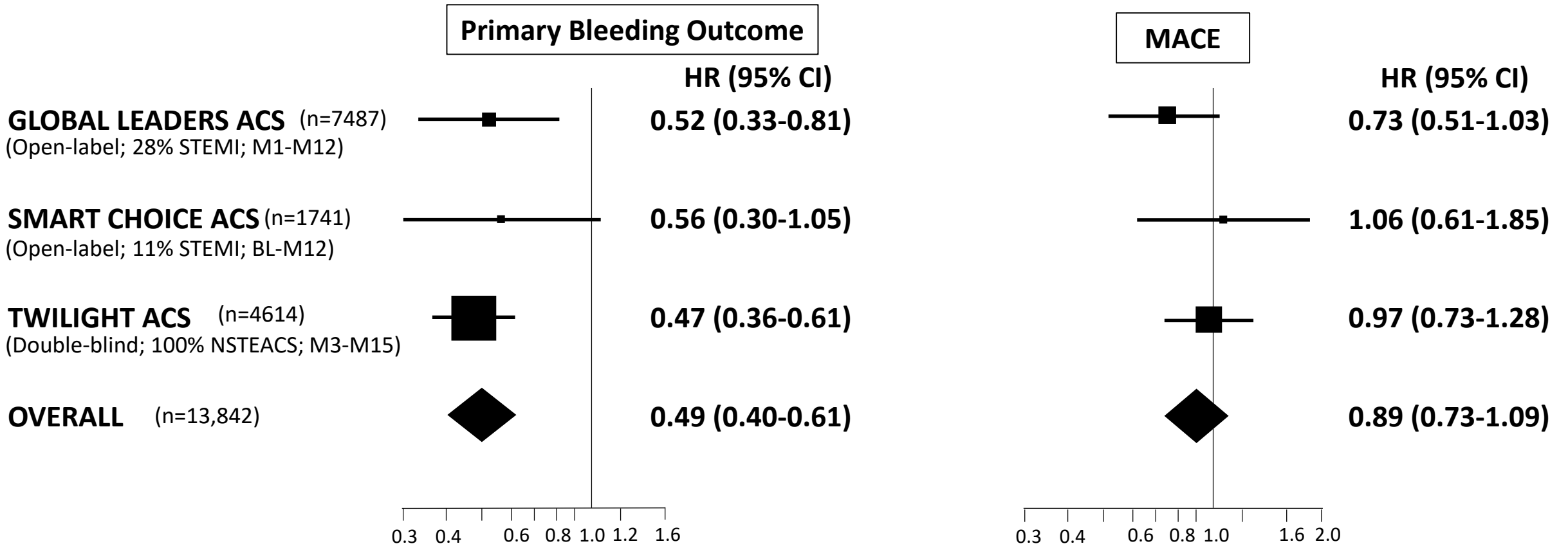
# Safety & Efficacy of Monotherapy with P2Y12 Inhibitor vs DAPT 1-3m post PCI



O'Donoghue ML et al., Unpublished

Vranckx et al., *Lancet* 2018;392:940; Hahn et al., *JAMA* 2019;321:2428; Watanabe et al., *JAMA* 2019;321:2414; Mehran et al., *NEJM* 2019:epub.

# Safety & Efficacy of Monotherapy with P2Y12 inhibitor vs DAPT 1-3m post ACS



O'Donoghue ML et al., Unpublished

MACE data for STOP DAPT2 in ACS not previously published

Tomaniak et al., *JAMA Cardiol* 2019:epub; Hahn et al., *JAMA* 2019;321:2428; Watanabe et al., *JAMA* 2019;321:2414; Mehran et al., *NEJM* 2019:epub.

# Remaining Questions

- **For patients on monotherapy, which P2Y12 inhibitor is best choice?**
  - Should we require genotyping or platelet function testing for patients on clopidogrel monotherapy?
- **Could ASA be safely discontinued before 1-3 months?**
- **Beyond M12, should a P2Y12 inhibitor be continued indefinitely without ASA?**
- **Even though the study population was high-risk, patient selection always raises questions about universal generalizability.**
- **Current study excluded STEMI patients, although reasonable representation across prior trials.**

# Conclusions

- **Discontinuation of aspirin markedly reduces bleeding when stopped 1-3 months post PCI and/or ACS for patients initially started on DAPT**
- **The evidence to date does not indicate that stopping ASA leads to any increase in the risk of MACE**
- **These findings now extend to patients with ACS, including those with high-risk clinical and angiographic features**