Platelet Inhibitors: Long Term Administration and Monitoring Issues 2013 Resolution

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Presenter Disclosure Information

Name: Dominick J Angiolillo

Within the past 12 months, the presenter or their spouse/partner have had a financial interest/arrangement or affiliation with the organization listed below.

Received payment as an individual for:
a) Consulting fee or honorarium from Bristol Myers Squibb, Sanofi-Aventis, Eli Lilly, Daiichi Sankyo, The Medicines Company, AstraZeneca, Merck, Evolva, Abbott Vascular and PLx Pharma;
b) Participation in review activities from Johnson & Johnson, St. Jude, and Sunovion.

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Current Controversies on DAPT in PCI

- Which drug?
- When to start?
- Monitoring?
- How long?

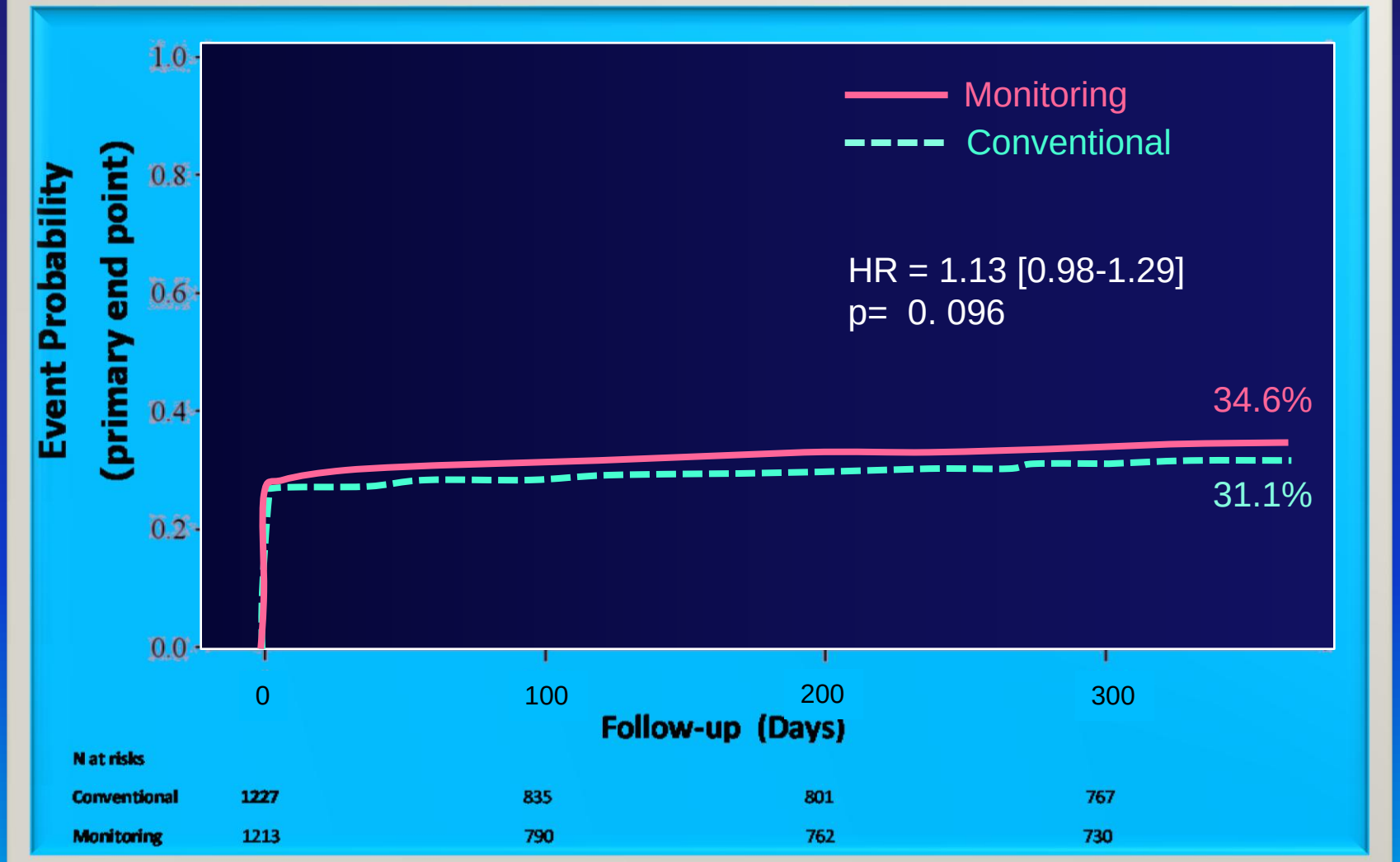
Where is the evidence?????

Limitations of Clopidogel Platelet Inhibition:

Therapeutic Options

Primary Endpoint to 1 year

Death, MI, stroke, stent thrombosis, urgent revascularization



2011 ACCF/AHA/SCAI Guideline for PCI
Platelet Function Testing

Platelet function testing may be considered in patients at high risk for poor clinical outcomes.

In clopidogrel-treated patients with high platelet reactivity, alternative agents, such as prasugrel or ticagrelor, might be considered.

No Benefit

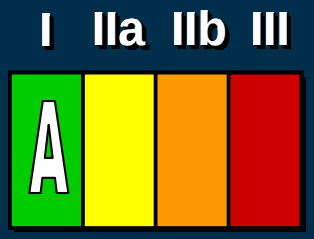
The routine clinical use of platelet function testing to screen clopidogrel-treated patients undergoing PCI is not recommended.

DES and DAPT duration

What are we treating?

The patient or the stent?

ESC 2011 UA/NSTEMI Guidelines



EUROPEAN SOCIETY OF CARDIOLOGY

A $P2Y_{12}$ inhibitor should be added to aspirin as soon as possible and maintained over 12 months, unless there are contraindications such as excessive risk of bleeding

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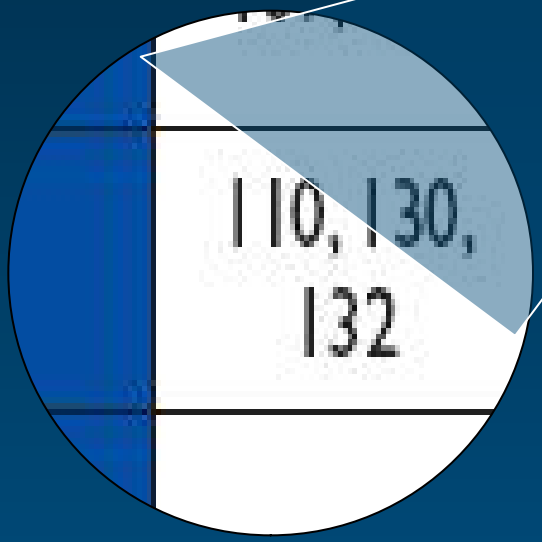
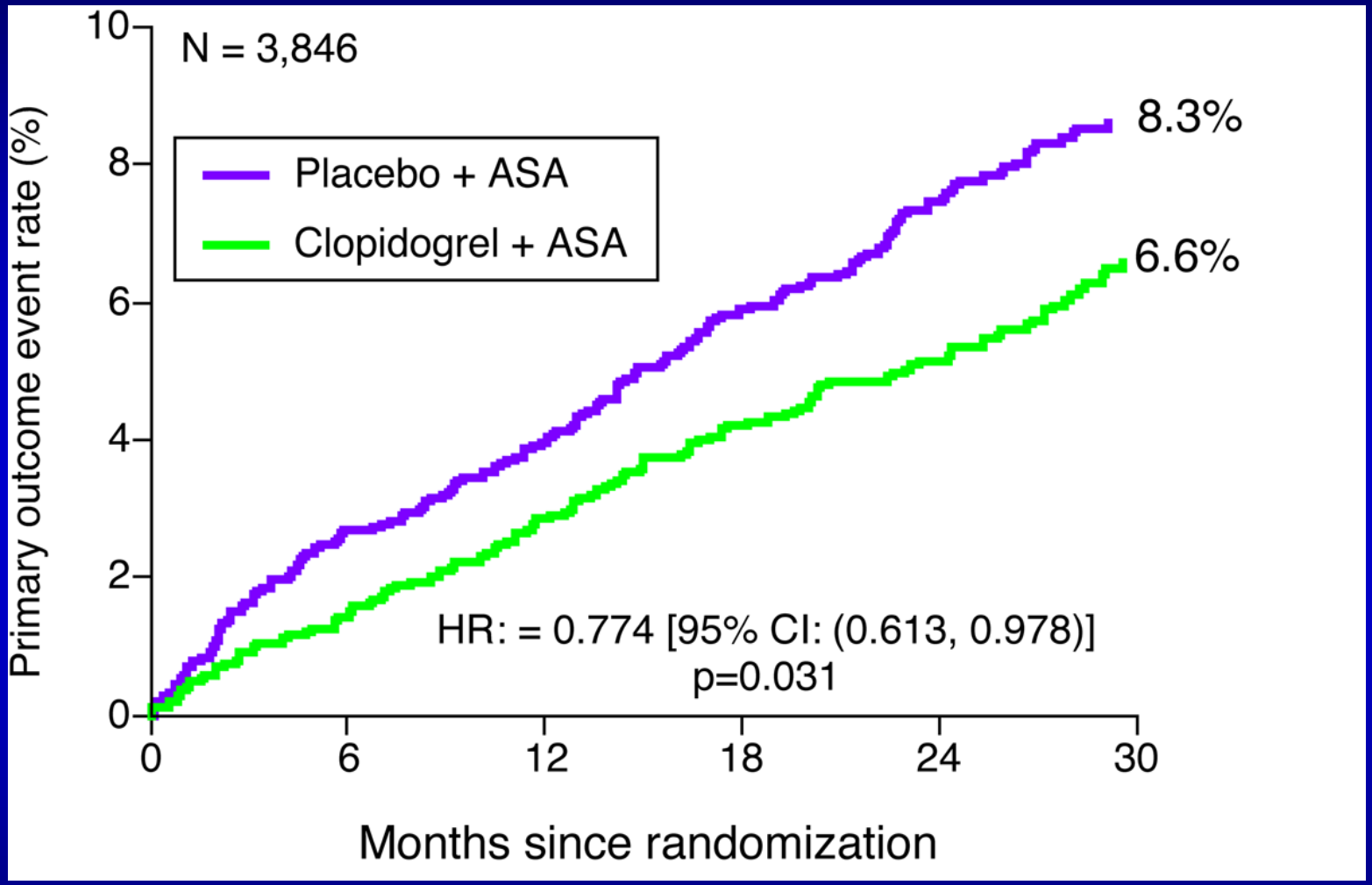
- **Ref #110: CURE**
- **Ref #130: TRITON**
- **Ref #132: PLATO**



Eur Heart J 2011; doi:10.1093/eurheartj/ehr236

CHARISMA – Prior MI



Bhatt DL, Flather MD, Hacke W, et al. JACC 2007; 49: 1982-8

Trial Schema

PEGASUS TIMI 54

N ~ 21,000

Stable pts with history of MI 1-3 yrs prior + ≥1 additional atherothrombosis risk factor*

** Age ≥65 yrs, diabetes, 2nd prior MI, multivessel CAD, or chronic non-end stage renal dysfunction*

RANDOMIZE
DOUBLE BLIND

Planned treatment with ASA 75 – 150 mg & Standard background care

- **Ticagrelor 90 mg bid**
- **Ticagrelor 60 mg bid**
- **Placebo**

Follow-up Visits
Q4 mos for 1st yr, then Q6 mos

Min 12 mos and median 26 mos follow-up
Event-driven trial

Primary Efficacy Endpoint: CV Death, MI, or Stroke
Primary Safety Endpoint: TIMI Major Bleeding

DES and DAPT duration

What are we treating?

The patient or the stent?

2011 ACCF/AHA/SCAI Guideline for PCI
Postprocedural Antiplatelet Therapy

After PCI, aspirin should be continued indefinitely.

The duration of $P2Y_{12}$ inhibitor therapy after stent implantation should generally be as follows:

a) In patients receiving a stent (BMS or DES) during PCI for ACS, $P2Y_{12}$ inhibitor therapy should be given for at least 12 months (clopidogrel 75 mg daily); prasugrel 10 mg daily; and ticagrelor 90 mg twice daily.

b) In patients receiving a DES for a non–ACS indication, clopidogrel 75 mg daily should be given for at least 12 months if patients are not at high risk of bleeding.

c) In patients receiving a BMS for a non-ACS indication, clopidogrel should be given for a minimum of 1 month and ideally up to 12 months (unless the patient is at increased risk of bleeding; then it should be given for a minimum of 2 weeks).

2011 ACCF/AHA/SCAI Guideline for PCI

Postprocedural Antiplatelet Therapy (cont.)

Continuation of clopidogrel, prasugrel or ticagrelor beyond 12 months may be considered in patients undergoing DES placement.

Recommended duration of dual antiplatelet therapy after PCI

- 1 month after BMS implantation in stable angina
- 6–12 months after DES implantation in all patients
- 1 year in all patients after ACS, irrespective of revascularization strategy.

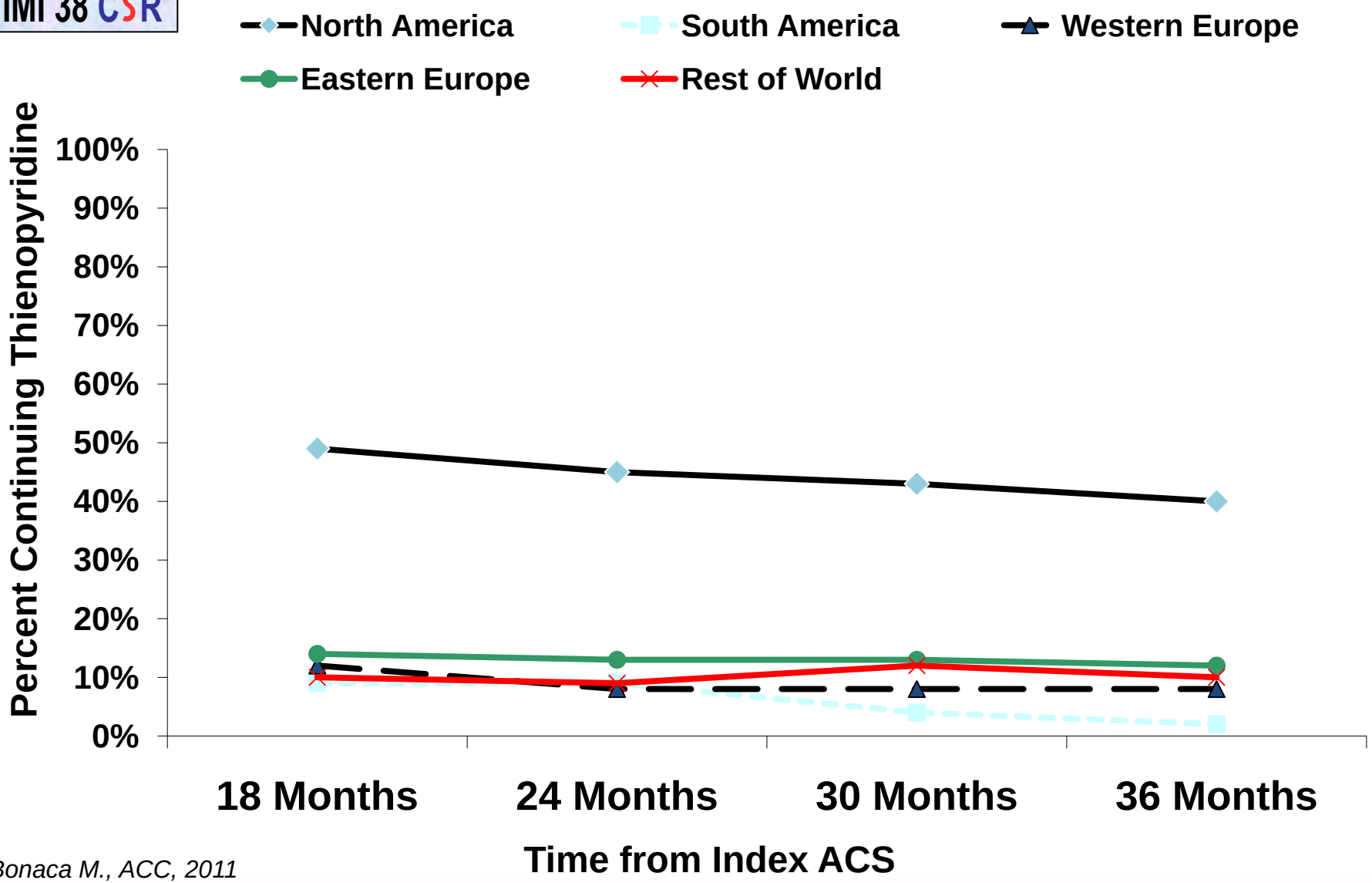
Challenging the guidelines

Duration of dual antiplatelet therapy is:

- **Too long!**
- **Not long enough!**

Prescription of DAPT After 12 m Highly Variable Across Regions

TIMI 38 CSR



Bonaca M., ACC, 2011

DES and DAPT duration

Are we overreacting to ST data from first generation DES?

Does DES type make a difference on duration on DAPT?

Optimal Duration of Clopidogrel Therapy

ISAR-SAFE

A double-blind, placebo-controlled RCT

6000

DES Patients

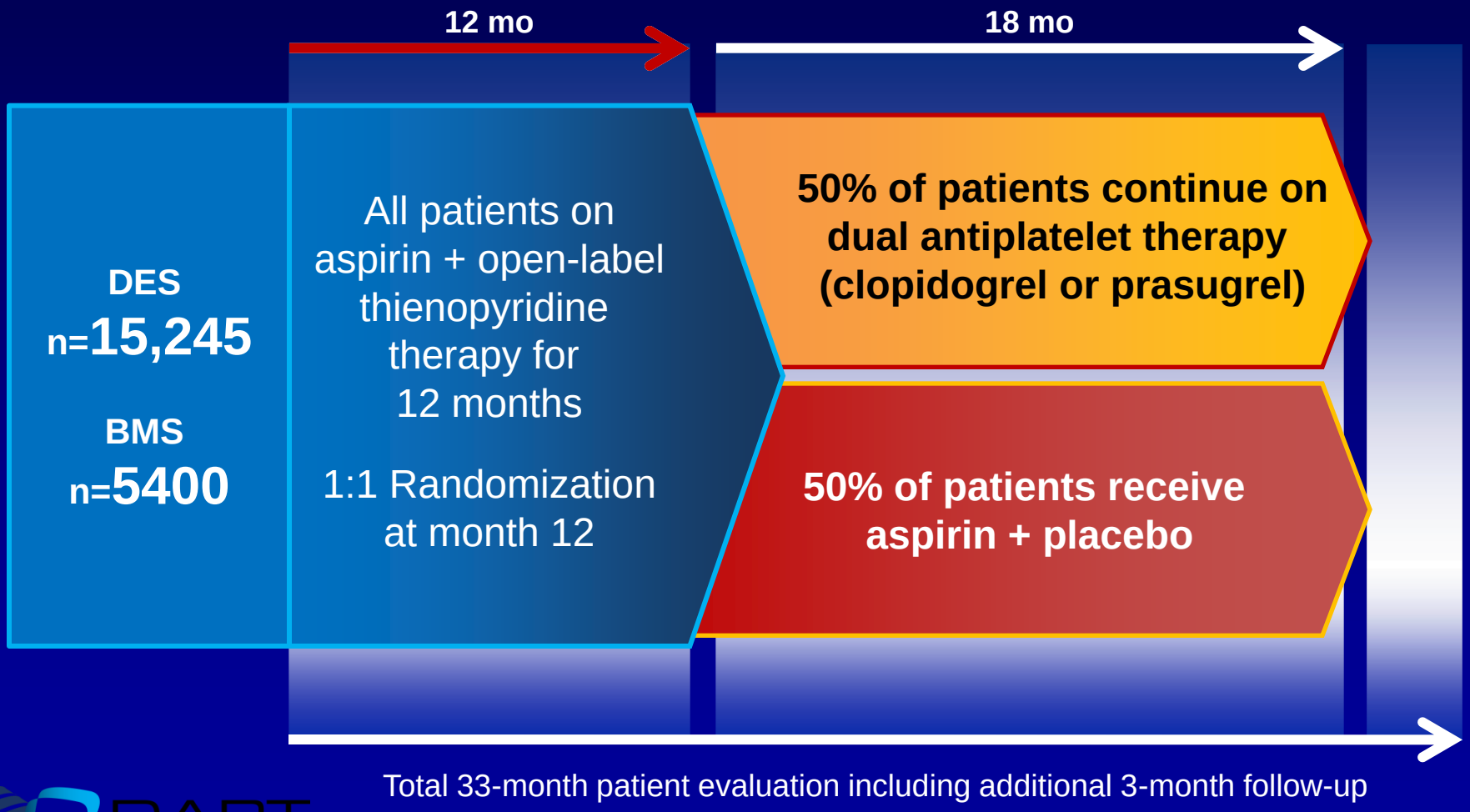
6-month therapy

12-month therapy

Primary end point at 15 months

A composite of death, MI, stent thrombosis, stroke, major bleeding

Dual Antiplatelet Therapy (DAPT) Study



DAPT STUDY

How long do I continue DAPT?

Practical Considerations

My 2013 Resolutions

How long do I continue DAPT?

Ideal situation: **Enroll the patient in a clinical trial and have the electronic randomization system make the decision.**

Caveat: **Not all patients are eligible for a clinical trial and not all patients want to be in a clinical trial!**

How long do I continue DAPT?

One-year in ALL of my ACS patients treated with DES (or BMS)! *Treat the patient!*

I continue dual antiplatelet therapy for >1-year if:

The answer is "YES" to *ANY* of the bellow questions:

1) Multiple hospitalizations for ACS?
2) Broad atherosclerotic burden /last patent vessel?
3) Prior MI (<3 years)?

and the answer is "NO" to *ANY* of the bellow questions:

1) Prior bleeding? (I may even consider <12 months)
2) Prior stroke? (class III per stroke guidelines)
3) Economic restraints?

How long do I continue clopidogrel therapy?

In my stable CAD pts "*I do not have a problem*" with stopping clopidogrel at 6-months if treated with second generation DES (unless very complex anatomy – left main, last patent vessel, complex bifurcation), although "*I still encourage*" to comply with 12-months therapy.

How long do I continue clopidogrel therapy?

New strategy in patients <u>who no longer require</u> DAPT: **Why not stop aspirin and continue with clopidogrel after 12 months? Generic clopidogrel is affordable! Clopidogrel monotherapy is superior to aspirin monotherpay in reducing ischemic events, with similar bleeding rates and less GI effects (CAPRIE trial).**

This is my strategy in my stented patients requiring montotherapy who are smokers, diabetics, PAD, TIA/stroke.