SYMPOSIUM LUNCH
Case Challenges in Type 2 Diabetes:
Patient-Centered Approaches for Complex and High-Risk Patients

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Announcements

- This activity is jointly provided by Tarsus Cardio Inc. and Medical Education Resources (MER).

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- All CME/CE information and faculty disclosures can be found in your program book.

- Presentations may contain discussion of non-FDA approved products and/or off-label discussion of products.

- This symposium is being video recorded. Please turn off all cell phones and pagers.

- Please submit your questions with the Question Cards located on each table. Staff members will collect cards throughout the program for Q&A.

- There is a paper evaluation placed on your seat; please be sure to fill it out and return to a staff member at the end of the program to receive CME/CE credit.

Learning Objectives

1. Discuss the pathophysiology of atherothrombosis in DM patients and optimal antithrombotic strategies to minimize long-term morbidity and recurrent events in this high-risk patient population.

2. Discuss the relationship of hypoglycemia to CVD and its implications on both short- and long-term outcomes for individuals with diabetes.

3. Integrate strategies into clinical practice to optimize and intensify traditional and novel antihyperglycemic therapy to improve glucose control, reduce risk of weight gain and hypoglycemia, and increase acceptance and adherence for patients, particularly elderly patients, with T2DM.

Patients with Type 2 Diabetes and ACS: What Are the Concerns?

Darren K. McGuire, MD, MHSc

Professor of Medicine

University of Texas

Southwestern Medical Center

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Case Study

- **HPI**: KAP is 53yo man w/ h/o HTN, uncontrolled T2DM p/w CP X 6hrs to ED

- **PMH**: T2DM x 4 yrs, "difficulty controlling blood sugar", HTN, and dyslipidemia

- **FH**: Father died from an MI at age 79; mother, age 87, is alive with a history of HTN and T2DM

- **SH:** 3 glasses of wine/day; 50 pk-yr smoker, quit 4 yrs ago

Case Study (cont'd)

- **MEDICATIONS ON ARRIVAL:**
  - **Metformin 1000 mg BID; glipizide 10 mg BID**
  - **Pravastatin 10 mg once daily**
  - **Telmisartan 80 mg once daily**
  - **Aspirin 81 mg once daily**

Case Study (cont'd)

EXAM: BP 146/92; HR 62; RR 14; 02 Sat 98% (RA); 5' 10", 220 lbs; BMI 31.6 kg/m^2

EKG: NSR; infero-lateral ST depressions; no prior tracing

LABORATORY RESULTS (in the ED):

- Troponin T 1.7 ng/ml
- Plasma glucose 213 mg/dL
- A1C 8.7%
- Lipids
  - Total cholesterol   174 mg/dL
  - Triglycerides   125 mg/dL
  - HDL-C   34 mg/dL
  - LDL-C (calc)   115mg/dL

- Serum creatinine, 1.3 mg/dL
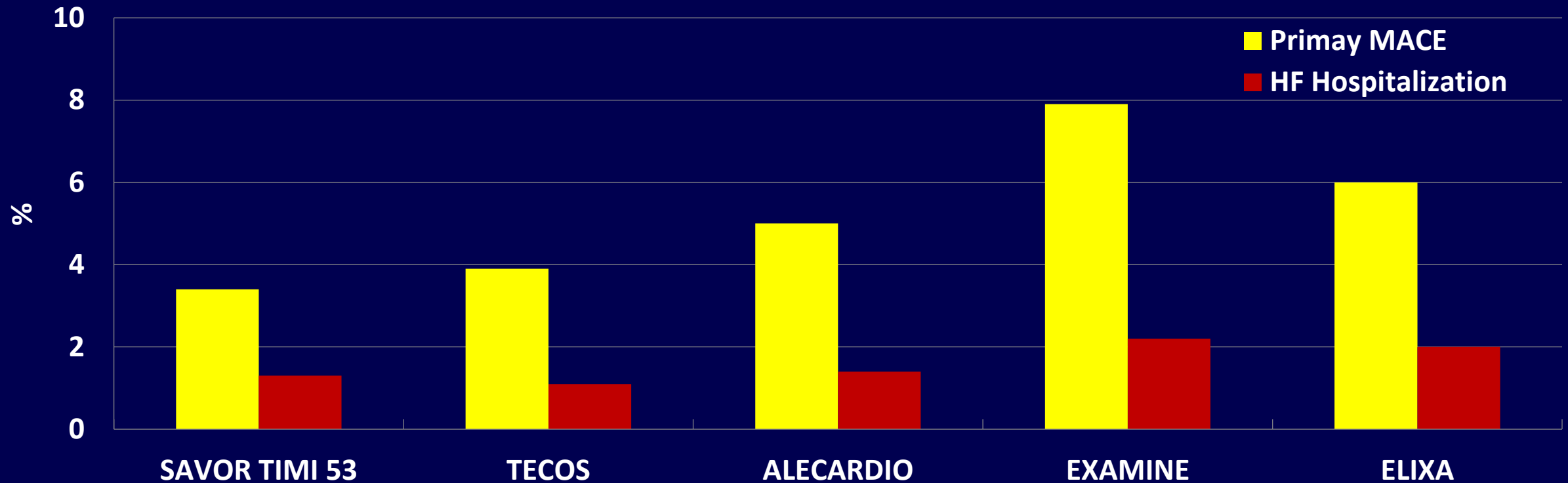- eGFR (CKD-EPI), 69 mL/minute per 1.73 m^2
- Spot UACR, 42 mg/g

Case Study (cont'd)

- **Symptoms + ECG + elevated first troponin = NSTEMI**

- **That afternoon, cardiac catheterization with single-vessel CAD of proximal RCA, with stenting of RCA with drug-eluting stent**

Residual Cardiovascular Risk with Diabetes: Annualized MACE Events from recent trials


Scirica BM et al. N Engl J Med 2013;369:1317-26; Green JB et al. N Engl J Med 2015;373:232-42; Lincoff AM et al. JAMA 2014; 311: 1515-1525; White WB et al. N Engl J Med 2013;369:1327-1335; Pfeffer MA et al. ADA Scientific Sessions 2015.

Diabetes as Predictor of Stent Thrombosis at 1 Year in the Era of DES
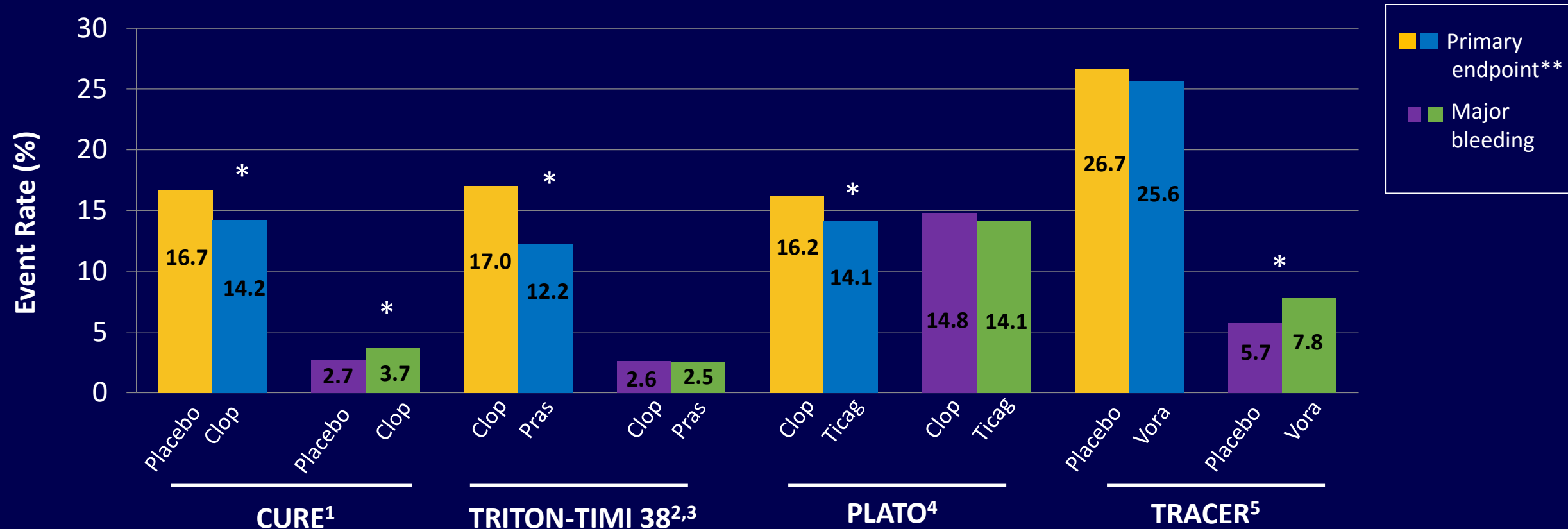

Cardiometabolic Health Congress • March 4-5 • San Francisco, CA
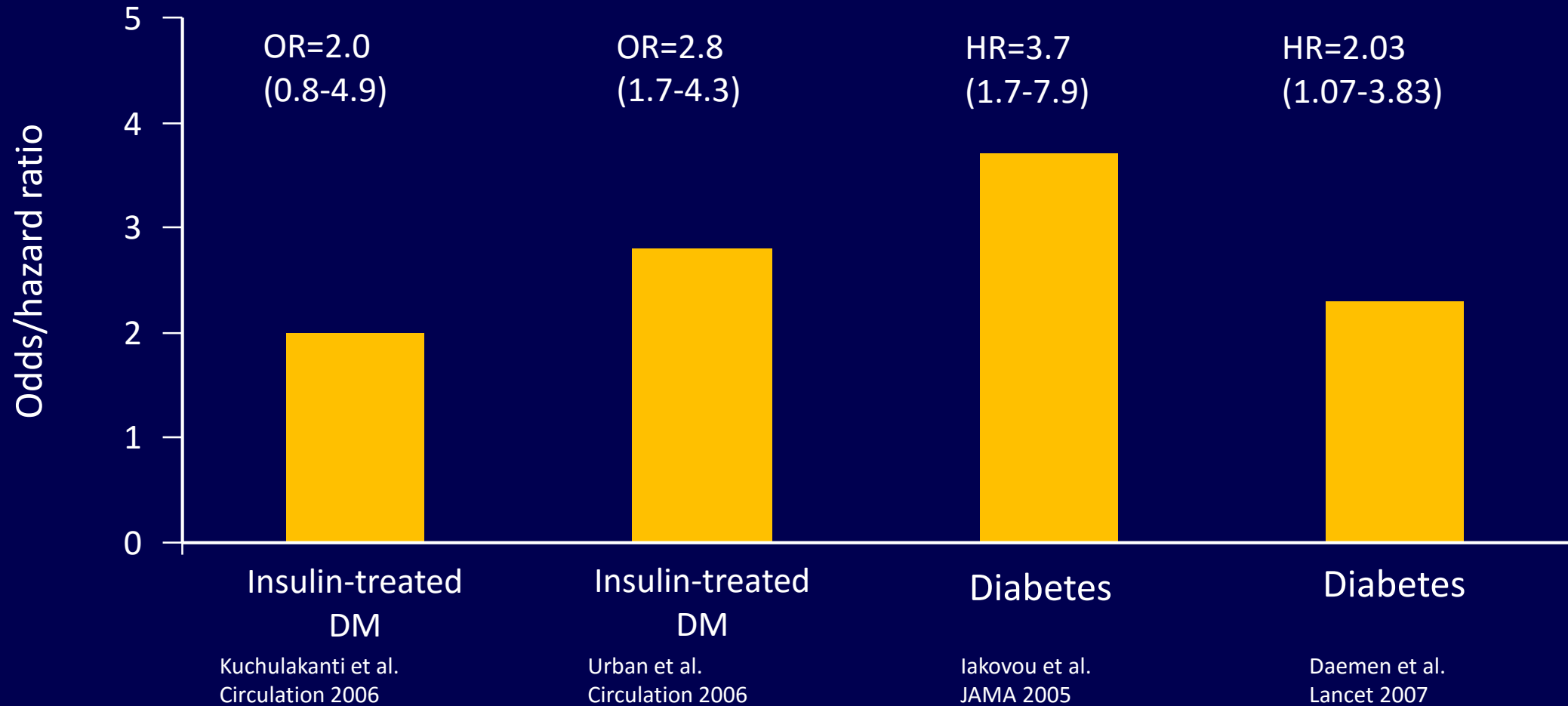
Oral Anti-Platelet Therapies
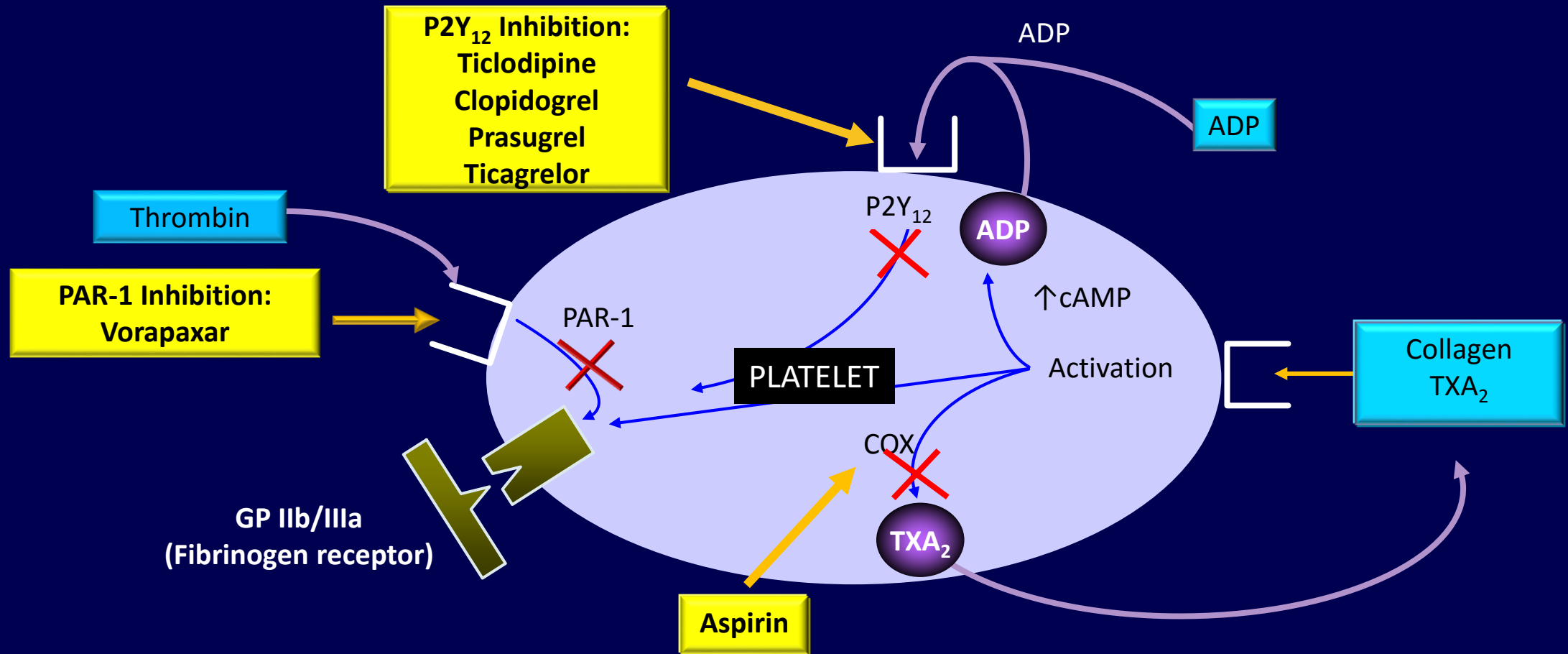
Adapted from Schafer. *Am J Med*. 1996;101:199-209.

Antiplatelet Efficacy and Safety in ACS Patients with DM

Legend:
- Primary endpoint**
- Major bleeding

Y-axis: Event Rate (%), scale 0 to 30

CURE[1]
- Placebo: 16.7 (Primary endpoint)
- Clop: 14.2 (Primary endpoint) *
- Placebo: 2.7 (Major bleeding)
- Clop: 3.7 (Major bleeding) *

TRITON-TIMI 38[2,3]
- Clop: 17.0 (Primary endpoint)
- Pras: 12.2 (Primary endpoint) *
- Clop: 2.6 (Major bleeding)
- Pras: 2.5 (Major bleeding)

PLATO[4]
- Clop: 16.2 (Primary endpoint)
- Ticag: 14.1 (Primary endpoint) *
- Clop: 14.8 (Major bleeding)
- Ticag: 14.1 (Major bleeding)

TRACER[5]
- Placebo: 26.7 (Primary endpoint)
- Vora: 25.6 (Primary endpoint)
- Placebo: 5.7 (Major bleeding)
- Vora: 7.8 (Major bleeding) *

* p<0.05

** Primary endpoint = composite of death from cardiovascular causes, nonfatal myocardial infarction, or stroke

Adapted from: **1. T**he Clopidogrel in Unstable Angina to Prevent Recurrent Events Trial Investigators. *N Engl J Med.* 2001; 345:494-502. 2. Wiviott SD et al. *N Engl J* Med. 2007;357:2001-2015. 3. Wiviott SD et al. *Circulation.* 2008;118:1626-36. 4. Wallentin L et al. *N Engl J Med.* 2009; 361:1045-1057. 5. Tricoci P et al. *N Engl J Med.* 2012;366:20-33.

Recommended Oral Antiplatelet Agents

Drug	Recommended Dose	Dosing Adjustments
Aspirin	Initial dose: 162-325 mg for at least 1 month Maintenance dose: 75 mg-162 mg/day continued indefinitely	
Clopidogrel	Loading dose: 300mg/600mg; Maintenance dose: 75mg per day daily in combination with aspirin (75 to 325 mg) daily.	• A diminished response to clopidogrel is observed in patients with CYP2C19 poor metabolizer status • The optimal dose regimen for these patients has yet to be determined
Prasugrel	Loading dose: 60 mg Maintenance dose: 10 mg once daily in combination with aspirin (75 to 325 mg) daily	• In patients that weigh less than 60 kg, consider lowering the maintenance dose to 5 mg
Ticagrelor	Loading dose: 180 mg Maintenance dose: 90 mg twice daily	• After 1 year administer 60 mg twice daily • Use with a daily maintenance dose of aspirin (75-100 mg)
Vorapaxar	Loading dose: 2.08 mg daily Maintenance Dose: 2.08 mg daily	• Contraindicated in patients with a history of transient ischemic attack (TIA) or stroke.

Case Study: What is the therapeutic plan?

- **TLC**
  - **Obesity; activity; EtOH; continued smoking abstinence**
- **Glucose**
  - **Acute**
  - **Chronic**
- **Statin**
- **Blood Pressure**
- **Anti-platelet**

Case Study: Therapeutic Plan

- **MEDICATIONS on ARRIVAL:**
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- **WHAT MEDICATIONS WOULD YOU PRESCRIBE TO THIS PATIENT AT DISCHARGE?**

Panel Discussion
Anne L. Peters, MD and Darren K. McGuire, MD, MHSc

THANK YOU