

## Late-Breaking Clinical Trial

### Session Title/Time/Location:

General Session/Friday, May 8, 2015, 9:00 am-9:30 am (Pacific Time)/General Session/Coronary Track (Indigo Level ABEF)

# 90-Day Effectiveness and Safety of Prasugrel vs. Clopidogrel as Used in Clinical Practice in Patients With ACS Undergoing PCI: Initial Findings from the PROMETHEUS Study

**Category:** Pharmacotherapy

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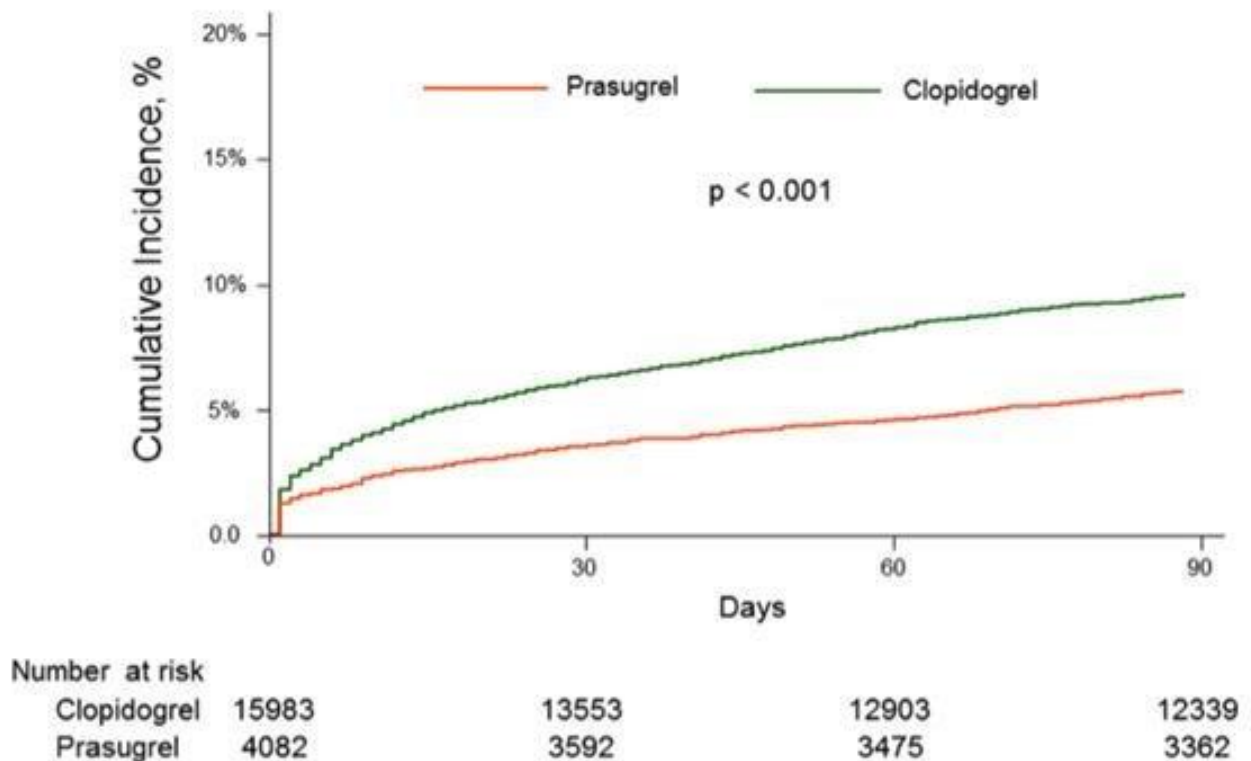
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**Background:** Compared to clopidogrel (clop), prasugrel (pras) reduces risk for major adverse cardiovascular events (MACE) in patients presenting with acute coronary syndromes (ACS) and undergoing PCI, but is associated with increased bleeding. The frequency, determinants and impact of physician directed use of pras vs. clop in ACS patients undergoing PCI is not well characterized.

**Methods:** We conducted a retrospective study of ACS patients (n=19,919) undergoing PCI with stenting at 8 US medical centers between 1/1/2010 and 6/30/2013. Patients were categorized according to clop or pras use at time of PCI. The effectiveness MACE endpoint was the composite occurrence of all-cause death, unplanned revascularization, stroke or MI within 90 days of PCI. The safety endpoint comprised post-procedural or clinically overt bleeding requiring hospitalization.

**Results:** Of the 19,919 patients in this study, 4058 (20.4%) received pras at time of PCI. Compared to patients receiving clop (n=15,861), those treated with pras were younger, less often female, with less renal dysfunction and anemia. Conversely, pras was used more commonly in patients presenting with ST-elevation MI and receiving longer stents. Unadjusted analyses showed compared to clop, pras was associated with lower MACE at 90 days (9.7% vs. 5.8%;  $p < 0.001$ , Figure) while rates of bleeding were not different (3.8% vs. 4.0%;  $p = 0.52$ ). Adjusted analyses using propensity methods will be presented.

Cumulative Unadjusted MACE at 90 Days by Prasugrel or Clopidogrel Use



**Conclusions:** In clinical practice, compared with clop, pras is used predominantly in lower risk patients and is associated with lower 90-day MACE with no increase in bleeding.

**Author Disclosures:**

1. Usman Baber: This author has nothing to disclose.
2. Samantha Sartori: This author has nothing to disclose.
3. Melissa Aquino: This author has nothing to disclose.
4. Craig Strauss: This author has nothing to disclose.
5. Joseph B Muhlestein: 8 Eli Lilly and Company.
6. Sunil Rao: This author has nothing to disclose.
7. Annapoorna Kini: This author has nothing to disclose.
8. Catalin Toma: This author has nothing to disclose.
9. Kanhaiya L. Poddar: This author has nothing to disclose.
10. Samir Kapadia: This author has nothing to disclose.
11. William Weintraub: This author has nothing to disclose.
12. Jaya Chandrasekhar: This author has nothing to disclose.
13. Sandra Weiss: This author has nothing to disclose.
14. Anthony DeFranco: This author has nothing to disclose.
15. Brian Baker: This author has nothing to disclose.
16. Elizabeth Marrett: This author has nothing to disclose.
17. Cliff Molife: This author has nothing to disclose.
18. Douglas Faries: This author has nothing to disclose.
19. Stuart Keller: This author has nothing to disclose.
20. Mark Efron: This author has nothing to disclose.
21. Stuart Pocock: This author has nothing to disclose.
22. Roxana Mehran: This author has nothing to disclose.