

# Duration of antiplatelet therapy following PCI, risk of adverse events

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An additional 18 months of dual antiplatelet therapy among patients who received a bare metal coronary stent did not result in significant differences in rates of stent thrombosis (formation of a blood clot), major adverse cardiac and cerebrovascular events, or moderate or severe bleeding, compared to patients who received placebo, according to a study in the March 17 issue of *JAMA*. The authors note that limitations in sample size may make definitive conclusions regarding these findings difficult.

Current clinical practice guidelines recommend a minimum of only 1 month of dual [antiplatelet therapy](#) (DAPT) after bare metal stent (BMS) placement following elective [percutaneous coronary intervention](#) (PCI; a procedure used to open narrowed coronary arteries, such as [stent placement](#)), compared with 6 to 12 months for drug-eluting stents (DES). Although randomized trial results showed a reduction in stent thrombosis and nonstent-related [heart attack](#) with thienopyridine therapy (a class of antiplatelet agents) beyond 12 months after DES placement, few trials have assessed optimal duration of DAPT after BMS, according to background information in the article.

Dean J. Kereiakes, M.D., of the Christ Hospital Heart and Vascular Center, Cincinnati, and Laura Mauri, M.D., M.Sc., of the Harvard Clinical Research Institute and Brigham and Women's Hospital, Boston, and colleagues randomly assigned 11,648 patients who received a [bare metal stent](#) (n = 1,687;) or drug eluting stent (n = 9,961), were treated with aspirin and who completed 12 months of DAPT without bleeding or

ischemic events to continued thienopyridine or placebo at months 12 through 30.

Among the patients treated with BMS who were randomized to continued thienopyridine vs placebo, rates of stent thrombosis were 0.5 percent vs 1.11 percent; rates of major adverse cardiac and cerebrovascular events (MACCE; composite of death, heart attack, or stroke) were 4.04 percent vs 4.69 percent; and rates of moderate/severe bleeding were 2.03 percent vs 0.90 percent, respectively.

Among all 11,648 randomized patients (both BMS and DES), stent thrombosis rates were 0.41 percent vs 1.32 percent; rates of MACCE were 4.29 percent vs 5.74 percent, and [rates](#) of moderate/severe bleeding were 2.45 percent vs 1.47 percent.

The results comparing continued thienopyridine vs placebo in the cohort treated with DES were previously reported and demonstrated significant reductions in [stent thrombosis](#) and MACCE.

The authors write that fewer patients treated with BMS were enrolled and randomized because of the prevailing use of DES in clinical practice. "The BMS subset may have been underpowered to identify such differences [in adverse events], and further trials are suggested."

**More information:** [DOI: 10.1001/jama.2015.1671](https://doi.org/10.1001/jama.2015.1671)

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