# Continued Clopidogrel Use Improves Outcomes

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SAN FRANCISCO — Continued use of clopidogrel significantly decreased the risk of death or MI at 2 years in patients with intracoronary drug-eluting stents, compared with bare-metal stents or in patients with either kind of stent who stopped clopidogrel after 6 months of use, Dr. John S. MacGregor reported.

Patients with drug-eluting stents who stopped taking clopidogrel after 6 months of use fared the worst, compared with the other three groups, according to a study published online by investigators at Duke University, Durham, N.C., Dr. MacGregor said at a meeting sponsored by the Cali-



By 24 months, the rate of death or MI was 0% for those patients with drug-eluting stents who took clopidogrel.

DR. MACGREGOR

fornia chapter of the American College of Cardiology.

All patients had been free of major cardiac events after stent implantation and 6 months of clopidogrel use. Patients with drug-eluting stents who stopped clopidogrel were more than twice as likely to die or have an MI by 24 months, compared with patients with drug-eluting stents who continued clopidogrel, said Dr. MacGregor of the University of California, San Francisco.

The rates of death or MI in patients with bare-metal stents who were on or off clopidogrel fell between the rates for the drug-eluting–stent groups, and they were significantly higher than rates in patients who had drug-eluting stents and who continued clopidogrel (JAMA 2007;297 [Epub doi:10.1001/jama.297.2.joc60179]).

Similar findings emerged for patients who were free of major cardiac events at 12 months after stent insertion. By 24 months, the rates of death or MI were 0% in patients with drug-eluting stents who continued clopidogrel, 5% in patients on drug-eluting stents who stopped clopidogrel or in patients with bare-metal stents who continued clopidogrel, and 4% in patients with bare-metal stents who stopped clopidogrel, he said at the meeting, also sponsored by the university.

Multiple investigators in the Duke study disclosed receiving research funding or having other financial ties with the companies that market clopidogrel, Sanofi-Aventis and Bristol-Myers Squibb.

Previous studies have shown that drugeluting stents decrease the risk for major adverse cardiac events in the first 3-6 months after insertion, compared with bare-metal stents. Use of clopidogrel is recommended for 3 months after insertion of a sirolimus-coated stent or for 6 months after insertion of a paclitaxel-coated stent.

In a study presented at the 2006 American College of Cardiology meeting, however, the risk for death or MI, or for non-

fatal MI, more than tripled in patients with drug-eluting stents who stopped taking clopidogrel, compared with patients with bare-metal stents who continued clopidogrel, he said. The 743 patients in the randomized Basal Stent Kosten Effektivitäts-Late Thrombotic Events (BASKET-LATE) trial had been event free after 6 months of clopidogrel use, and were followed for another 6-12 months off the drug.

These and other studies raise concerns that the recommended regimen of clopi-

dogrel after insertion of drug-eluting stents is insufficient.

"My bias is to have people with drugeluting stents take Plavix [clopidogrel] indefinitely unless they have bleeding problems," Dr. MacGregor said.

Further studies are needed to determine the optimal duration of clopidogrel therapy after stent implantation and to include rates of side effects from extended-duration clopidogrel.

Two out of three recent placebo-con-

trolled trials of long-term clopidogrel use found that taking clopidogrel plus aspirin for 1-2.5 years significantly increased the rate of major or moderate bleeding events, compared with taking clopidogrel plus placebo, he said.

About 600,000 U.S. patients receive intracoronary stents each year. One year of clopidogrel therapy costs approximately \$1,400. Long-term clopidogrel use also might interfere with valuable procedures like colonoscopy or noncardiac surgery.



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