

## **Study: Three-Drug Regimen Favored In Asia Is Useful In Preventing Clots After Angioplasty**

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<http://www.asianscientist.com/health-medicine/angioplasty-three-drug-regimen-clopidogrel-aspirin-ddat-t-at-cilostazol-2012/>

*AsianScientist (Mar. 30, 2012)* - A three-drug regimen is equal to a double-dose two-drug approach in preventing clots after angioplasty, says new research presented this week at the American College of Cardiology's 61st Annual Scientific Session.

The three-drug regimen, favored in Asia to increase anti-clotting effect, was found to be as safe and effective as a double-dose two-drug treatment commonly used in Western countries.

Angioplasty – a procedure that improves blood flow to the heart through dilation of the artery and insertion of a metal stent – comes with a known risk of blood clots as platelet cells rush to the injured area and clump together in a natural healing response.

For that reason, treatment with anti-platelet drugs such as clopidogrel is standard after angioplasty. Double-dose dual anti-platelet therapy (DDAT), using aspirin and double-dose (150 mg) clopidogrel, is a potent anti-platelet regimen for high-risk patients undergoing angioplasty.

In Asia, cilostazol is added to dual anti-platelet therapy (DAT: aspirin and 75 mg of clopidogrel) in high-risk patients, and the regimen is known as triple anti-platelet therapy, or TAT.

Several studies have demonstrated that cilostazol does more than prevent platelet clumping; it also shows activity in preventing new tissue overgrowth where the stent has been placed (restenosis), widening blood vessels (vasodilation), protecting kidneys, and improving blood levels of lipids like cholesterol and triglycerides.

"TAT is widely used in Korea and Japan because we experienced the benefit of cilostazol in terms of major adverse cardiovascular events (MACE) after angioplasty," said principal investigator Dr. Hyo-Soo Kim, director of cardiac catheterization and coronary intervention at Seoul National University Hospital.

"In the numerous clinical studies about angioplasty, we have an impression that the MACE rate is lower in Korean studies than in Western ones."

Although previous studies support the addition of cilostazol to conventional dual anti-platelet therapy, cilostazol is not familiar to many Western physicians because it was developed by a Japanese company that has neither marketed it widely outside Asia nor sponsored a large clinical trial of the drug.

"Most clinical evidence supporting cilostazol's benefit comes from investigator-initiated trials like

ours," Kim said. "HOST-ASSURE is the first large-scale randomized trial to directly compare the two treatment strategies and confirm the non-inferiority of TAT compared with DDAT."

In the HOST-ASSURE trial, patients were randomly assigned to TAT (1,879 patients) or to DDAT (1,876 patients). TAT group patients received 100 mg of cilostazol twice daily in addition to DAT for a month after the procedure; DDAT group patients received the maintenance regimen of 150 mg of clopidogrel with aspirin.

One month after angioplasty, 23 patients (1.2 percent) in the TAT group and 27 patients (1.4 percent) in the DDAT group experienced events such as cardiovascular-related death, non-fatal heart attack, stroke and major bleeding, demonstrating non-inferiority of the three-drug regimen compared with the double-dose two-drug treatment.

"This study provides evidence for the already popular adjunctive use of cilostazol in clinical practice in Asia – in particular in Korea and Japan," Kim said.

"If TAT is equivalent to a potent regimen such as DDAT that is used for high-risk patients, TAT would be preferred because it has additional vascular biologic benefit on top of its anti-platelet effect."

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Source: [American College of Cardiology](#).

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