

EDITED BY CATHERINE ARNST

Some 23,000 medical professionals at the annual American Heart Assn. conference in New Orleans Nov. 8-12.

DRUG TRIALS

The Crestor Conundrum

A groundbreaking 18,000-patient study called Jupiter dominated the AHA meeting. It found that AstraZeneca's Crestor, a cholesterol-lowering statin, reduced the number of heart attacks, strokes, and other events by 44%—results that will likely increase demand for statins. But some scientists caution it is difficult to interpret the findings.

Jupiter was designed to test a controversial theory that inflammation in the arteries is a key cause of heart disease. The trial consisted entirely of people with



normal cholesterol readings but high levels of a molecule in the blood called C-reactive protein (CRP), which rises when inflammation is present. Crestor effectively lowered both CRP and cholesterol. Consequently, it is difficult to say whether a reduction in CRP, or in cholesterol, or a combination of both is responsible for the reduction in adverse events.

For your inflammation? The statin lowers CRP

Many cardiologists argue against wholesale screening of the population for CRP, which is a costly and imperfect gauge. "Can our society afford to put millions more people on an expensive drug, and screen them with an expensive test when the money might better be used elsewhere?" asks Dr. Sharonne Hayes of the Mayo Clinic in Rochester, Minn.

SUPPLEMENTS

In This Case, Don't Take Your Vitamins

Fresh data have cast a somber light on health supplements. In one of the biggest-ever studies of vitamins, researchers reported that recommended daily doses of vitamins C, E, and B do nothing to prevent heart disease. Funded in part by the National Institutes of Health, the 10-year Physicians Health Study enrolled 14,461 doctors, all 50 or older. One-fourth were given vitamin C, one-fourth E, one-fourth both vitamins, and the remaining quarter a placebo. No

benefits were seen, and vitamin E slightly increased the risk of bleeding strokes. Another large, seven-year study at Oxford University, England, tested Vitamin B9 (folic acid) and B12 in 12,064 heart attack survivors. It found no cardiovascular benefits.

Bad news for vitamins: placebos work as well



WHAT'S NEXT

ENZYME THERAPY

Building Muscles With Genes

Fixing heart ailments by delivering healthful genes to the organ remains the great, unrealized hope of cardiovascular treatment. But Celladon in La Jolla, Calif., seems to have come a step closer. It reported on the progress of the first nine human subjects to be treated with Mydicar, a "gene therapy" for heart failure, which is caused by weakened cardiac muscles.



The treatment, infused into an artery, makes use of a benign virus to transport to the heart a gene that produces the enzyme SERCA2a. This molecule normally helps heart-muscle cells to contract properly, but levels typically drop off in the late stages of heart failure.

Dr. Roger Hajjar of Mount Sinai School of Medicine in New York reported that Mydicar was safe and there was some heart function improvement in more than half of the patients. The trial was too small for the results to be statistically significant, but Celladon is proceeding with a Phase 2 trial of 46 patients.

About 5 million people in the U.S. suffer from heart failure, for which there is no cure other than a transplant. It is the nation's leading cause of hospitalization.

(CLOCKWISE FROM TOP) THOM LANG/CORBIS; PHOTO RESEARCHERS INC.; GLOW IMAGES/GETTY IMAGES; CMS PHOTOS

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