



CARDIOVASCULAR NEWS

Increasing Lipitor® dosage can reduce cardiovascular events

The five year Treating to New Targets Trial (TNT) involved 10,000 patients with established coronary heart disease and elevated low-density lipoprotein LDL. The study examined high-dosages of Lipitor (atorvastatin calcium) to aggressively lower LDL to below the current guidelines (100 mg/dL) and compared the results to patients who kept their LDL at recommended levels.

The study found that Lipitor use combined with cholesterol reduction significantly reduced the occurrence of heart attack and strokes. Patients taking 80 mg

doses of Lipitor had 22% fewer cardiovascular events and 25% fewer strokes compared to patients who took 10 mg.

The TNT demonstrated the musculoskeletal safety profile of Lipitor at 80 mg dosing was comparable to Lipitor 10 mg doses. Liver enzyme elevations in both groups was within existing product labeling. TNT is the longest and largest study to date of Lipitor 80 mg efficacy and safety.

Lipitor patients who reduced "bad" cholesterol to very low levels show significant decrease in heart attack and stroke. March 8, 2005.

Study shows atherothrombosis is seriously undertreated worldwide

The REACH (REduction of Atherothrombosis for Continued Health) registry observed 60,000 patients recruited from 43 countries and showed that, despite management improvement of atherothrombosis, at-risk patients remain insufficiently managed.

The unique geographic and ethnic diversity revealed a universal inadequacy in management of the disease. Atherothrombosis, the leading cause of global mortality, is an unpredictable and lifelong vascular disease that puts patients at high risk for future heart attack, stroke or vascular death.

The real-life setting of REACH includes people with a previous history of events in cerebrovascular disease, coronary disease or symptomatic peripheral arterial disease. Also, REACH monitored people with at least three risk factors (*e.g.*, smoking, high blood pressure, high cholesterol, diabetes or obesity) and no manifestation of atherothrombotic events.

Atherothrombosis is the common thread linking heart attack, stroke and peripheral arterial disease.

Largest global observational study of its kind shows atherothrombosis is seriously undertreated worldwide. March 2005.

Extensive study finds Aspirin® reduces first stroke risk in women

The 10-year, randomized Women's Health Study (WHS) found Aspirin (Bayer®) helps prevent first stroke in apparently healthy women. Women, aged 65 and older, saw the greatest benefit of aspirin, with reductions in major cardiovascular events, including heart attack (myocardial infarction) and ischemic stroke.

The study showed a 17% reduction in the risk of a stroke and a 24% reduction in the risk of an ischemic stroke (which account for more than 80% of all strokes).

Low-dose aspirin did not yield significant benefits in preventing first heart attack or cardiovascular death to the total population of the study (mostly aged 45 to 55).

The supportive data of the large WHS of 40,000 women provides important public health implications because "more women suffer strokes than heart attacks," said Julie E. Buring, principal investigator of the WHS.

The WHS supports aspirin's favorable benefit/risk profile. There are risks and an aspirin regimen should not be started or stopped without consulting with a health-care professional.

Longest, largest study ever conducted with aspirin finds it reduces the risk of a first stroke in women. March 10, 2005.

Rimonabant improves cardiovascular risk factors in two-year study

Rimonabant is the first in a new class of therapeutic agents called selective CB₁ Blockers. A two-year phase III study of 1,507 patients treated with rimonabant (20 mg/day) demonstrated continued cardiovascular risk factor improvements throughout the study.

The trial was to assess the effects of rimonabant on weight loss for a period of one year and to determine its potential to maintain weight loss during a second year of treatment. Improvements in waist circumference and metabolic risk factors were assessed, as were the safety and tolerability profile of rimonabant over the two-year period.

The RIO-Europe findings demonstrated maintained body weight loss, reduced waist circumference, improved metabolic profile and a reduced number of patients meeting the NCEP (National Cholesterol Education Program) criteria for metabolic syndrome, thus diminishing cardiovascular risk factors.

Significant improvements in high-density lipoprotein, weight loss, and waist circumferences were seen in patients taking 20 mg/day of rimonabant versus the placebo group.

Improvement in cardiovascular risk factors with rimonabant demonstrated in two-year study. March 8, 2005.

Skin sterol linked to hidden coronary artery disease

PREVU* is a point-of-care skin sterol test measuring skin tissue cholesterol in a five-minute, non-invasive test that does not require drawing blood or a special pre-test diet.

The study evaluated 81 patients who had no history of cardiovascular disease. The patient's skin tissue cholesterol was measured and they underwent a B-mode ultrasonography to analyze carotid intima-media thickness (CIMT), which helps to measure hardening and narrowing of the arteries. CIMT is considered an independent marker of a patient's risk for myocardial infarction and stroke.

The study revealed a correlation between patients with high skin sterol and significantly higher CIMT (even after adjustment for age, sex, blood sugar and systolic blood pressure).

More than half of those who die from heart disease, die suddenly and without any prior symptoms.

Skin sterol is linked to hidden heart disease. March 9, 2005.

Heart failure preceded by electrical changes

Long before any clinical symptoms, new research is showing that electrical changes in the heart can predict heart failure. These initial changes can then cause later phase changes that result in lethal arrhythmias.

The study was the first to describe the time-course and nature of electrical abnormalities occurring during the development of heart failure. Researchers hope that early definitions of electrical changes can identify new targets for therapy that can either reverse or hinder the progression of events that lead to death.

Isolating small samples of heart tissue from dogs in various stages of heart failure and using optical mapping to

stain the tissue samples with voltage- or calcium-sensitive dyes, they shined a green light on the samples to excite the photosensitive dyes. Depending on the cellular voltage or calcium levels in the individual tissue samples, the excited photosensitive dyes emitted light in different amounts. A sensitive optical detection system collected the emitted light, converted it to current and stored it on a computer for analysis.

Researchers found that early and late changes in the electrical properties were required to cause a lethal arrhythmia. *PCard*

Student identifies electrical changes preceding heart failure. March 9, 2005.