



CARDIOVASCULAR NEWS

New Tool to Diagnose CHF

Roche Diagnostics announced it received clearance from Health Canada for its proB-natriuretic peptide (BNP) assay. The new assay is the first fully-automated test available for the diagnosis of congestive heart failure (CHF). It has a negative predictive value of up to 100% and clinical studies proved the assay does not interfere with other drugs. ProBNP is also more stable than BNP in blood samples, allowing more accurate results.

The proBNP assay will allow physicians to access, for the first time with a laboratory test, the left ventricular dysfunction associated with CHF. Left ventricular dysfunction is the result of a number of clinical conditions, such as coronary heart disease, hypertension, valvular defects, and primary cardiac muscle disease. Furthermore, the assay has the ability to not only diagnose CHF, but also to identify patients at risk for developing CHF.

In Canada, heart failure is the leading cause of hospitalisation, with estimated hospital costs of \$1 billion per year. Three hundred thousand Canadians suffer from heart failure and 40,000 new cases are identified each year.

Roche Diagnostics' proBNP assay approved by Health Canada. Montreal (Quebec), February 26, 2003.

A New Standard for Angioplasty Treatment

A new study, the Randomised Evaluation in PCI Linking Angiomax to reduced Clinical Events (REPLACE-2), validated Angiomax® (bivalirudin) as a new standard of treatment for coronary angioplasty. The study compared a heparin and GP IIb/III (intravenous platelet blockers) regimen to an Angiomax/GP IIb/III regimen. The Angiomax regimen was found to be as effective as the heparin regimen, but easier to use, safer, and less costly. The Angiomax combination resulted in a 41% reduction in major bleeding, 32% reduction in transfusion, and 59% reduction in thrombocytopenia. According to the study's steering committee chairman, Eric J. Topol, the trial is noteworthy due to its size, relevance, and results.

Coronary angioplasty is a procedure conducted on more than 40,000 Canadians annually to clear restricted blood flow in coronary arteries. Angiomax was approved in Canada for use in coronary angioplasty in October 2002. In other clinical trials, it has shown a reduction in the incidence of death, myocardial infarction, and the need for revascularisation in patients undergoing angioplasty, as well as significant reductions in bleeding.

Study published in *Journal of the American Medical Association* validates Angiomax® (bivalirudin) as a new standard of care for angioplasty treatment. Mississauga (Ontario), February 20, 2003.

ACE Inhibitors Better than Diuretics for Hypertension

A new study in the *New England Journal of Medicine* is raising questions about an earlier study showing superior efficacy of diuretics. The Australian National Blood Pressure (ANBP-2) study favours angiotensin-converting enzyme (ACE) inhibitors over diuretics to treat hypertension, a conclusion that differs from the much-publicised Antihypertensive and Lipid-Lowering treatment to prevent Heart Attack Trial (ALLHAT). The ACE inhibitor recommended in ANBP-2 is Vasotec® (enalapril).

By comparing outcomes with ACE inhibitors and diuretics, the ANBP-2 data provide leads on what treatment is most effective for elderly people suffering from high blood pressure.

New data confirms superior efficacy of ACE inhibitors over diuretics in the treatment of hypertension. Montreal (Quebec), February 20, 2003.

Is Kidney Disease Becoming an Epidemic?

An important area of health maintenance for people with diabetes is the prevention of kidney disease—a disease that has increased by 150% in the past decade, mostly in people with diabetes. People with diabetes and hypertension are at especially high risk of developing nephropathy, which can progress to kidney failure. Diabetes experts are looking for ways to stop this progression as early as possible. Already, urine tests are being used to detect protein in the urine, as this is an early sign of renal disease. Doctors are also being encouraged to emphasise to patients the importance of a proper diet, exercise, and smoking cessation.

Medical treatment for hypertensive people with diabetes includes angiotensin-converting enzyme inhibitors or angiotensin receptor blockers. Optimal treatment also includes calcium channel blockers (CCBs); however, of the two classes of CCBs, one may actually exacerbate kidney decline. Therefore, researchers are now saying that benefits from CCBs for people with diabetes and hypertension may only exist with treatment using a non-dihydropyridine CCB, such as diltiazem and verapamil.

Confronting an emerging epidemic in kidney disease: Treating to target or aiming beyond? Toronto (Ontario), February 13, 2003.