Acarbose Cardiovascular Evaluation (ACE) Trial in prediabetic subjects

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The close relationship between coronary heart disease and dysglycaemia, confirmed by the Euro Heart and China Heart Surveys, is addressed by the joint European Society of Cardiology and European Association for the Study of Diabetes guidelines which encourage early and direct intervention to prevent cardiovascular disease (CVD) in those with prediabetes. The STOP-NIDDM study suggested that treating postprandial hyperglycaemia with acarbose in impaired glucose tolerance (IGT) could reduce CVD risk. This possibility is being evaluated in a double-blind, randomized, placebo-controlled, clinical outcome trial of acarbose in Mainland China and Hong Kong. The three-year Acarbose Cardiovascular Evaluation (ACE) trial will recruit 6,500 individuals $\geq$50 years old with CVD (previous myocardial infarction (MI), stable or unstable angina) or acute coronary syndrome (ACS), who are shown to have IGT on a single 75g oral glucose tolerance test (OGTT). Patients will be excluded if they have a previous history of type 2 diabetes, have suffered a cardiovascular event within the previous 3 months, or have undergone or plan to have cardiovascular surgery. Patients will receive international standard-of- care therapy for their existing CVD during the trial (antiplatelet therapy, statin, angiotensin converting enzyme inhibition, beta-blocker and/or antihypertensive therapy as considered appropriate). Patients will be followed four-monthly for a minimum of 3 years with annual OGTTs. The ACE primary endpoint is the occurrence of a new cardiovascular event (first to occur of cardiovascular death, resuscitated cardiac arrest, non-fatal MI, stroke) with new-onset diabetes as a secondary endpoint. Final trial results are expected in 2012.