The American College of Cardiology Scientific Session – ACC’09, Orlando, Florida

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This year, the American College of Cardiology Scientific Session, ACC’09 and 12 Summit (the Interventional Cardiology Summit) were held in Orlando, Florida, between 28th and 31st of March.

Orlando was established as a city in 1895, possibly after the name of a soldier called Orlando Reeves. Today, the city of Orlando has just over 220,000 inhabitants, but the whole metro area numbers over 2 millions. By US standards it is not a big city. Orlando is best known worldwide by the presence of Walt Disney World Resort – opened in 1971. It is a major tourist attraction, which attracts more than 10 million visits per year. But apart from the theme Parks of Orlando (like Walt Disney, SeaWorld, Universal Resort) and the Kennedy Space Center in Cape Canaveral (some 100km away) there is nothing else to see – just huge areas of absolutely flat terrain crossed-over by huge motorways. That takes us back to the ACC’09 Congress which was held in the Orange County Convention Center (the second largest convention center in US).

From a scientific perspective, ACC’09 was a fruitful event. Several major trials were presented here, and the results were concomitantly published in major scientific medical journals, like The New England Journal of Medicine (NEJM) and The Lancet.

The STICH trial showed that performing surgical ventricular reconstruction at the time of coronary artery by-pass has no added benefit compared with by-pass alone, in patients with heart failure caused by coronary artery disease. The ACTIVE trial (published online by NEJM) showed that adding clopidogrel to aspirin decreases the risk of stroke by 28% in patients with atrial fibrillation (AF) that were not candidates for oral anticoagulation, at the cost of increased risk of major bleeding by 43%. The PROTECT AF trial, showed that a new implantable device (the Watchman cage) is not inferior to warfarin in lowering the risk of stroke and death, and has a lower risk of bleeding, in patients with AF. This promises to become an im-
portant treatment of AF in the future. The AURORA trial (published online by NEJM) showed that despite lowering LDL cholesterol by 43%, rosuvastatin did not decrease the risk of major cardiovascular events in patients receiving hemodialysis. Another trial that included more than 17,000 healthy participants, also published by NEJM, showed that rosuvastatin 20mg/day decreased the risk of venous thrombembolism (VTE) by 43%. This might look much, but I still wonder what is the relevance of this trial in clinical practice since only 94 subjects (0.5%) suffered an episode of VTE during the follow-up (2 years). In the JUPITER trial (published by The Lancet), treatment with rosuvastatin decreased the risk of major cardiovascular events in healthy subjects only if both the LDL and CRP level decreased below the prespecified targets (70 mg/dl for LDL, and 2mg/l for CRP). Achieving only one target had no effect on the outcome. A trial investigating the use of relaxin in the setting of acute heart failure (also published by The Lancet) showed that this vasodilator peptide significantly improved dyspnoea and other surrogate markers of benefit, and promise to become a new treatment for heart failure. The PRIMA trial showed that guiding treatment for heart failure based on the level of brain natriuretic peptide (BNP) has no advantage compared with clinical-guided therapy.

A new version of the AHA/ACC guideline for the diagnosis and management of heart failure (last issued in 2005) was published during this event. A free copy of this guideline can be found at: http://circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.109.192065v1

The results of several other trials were presented at ACC’09 – I have only mentioned a few. A summary of the scientific events that took place at the ACC’09 meeting can be found at http://acc09.acc.org/Pages/ScientificSessionNews.aspx.

In summary, the ACC’09 and 12 Scientific Sessions were a success, managing to present during the 3 days of meeting the results of several important clinical trials. Moreover, it was an opportunity to meet the medical community from around the world, and establish new links of future collaborations.