Results of RADIANCE 2 trial

July 2007 – Administration of torcetrapib did not influence atherosclerosis progression despite substantially raising HDL cholesterol levels, according to the results of the RADIANCE 2 study, published in the *Lancet*.[1]

The RADIANCE 2 study (Rating Atherosclerotic Disease Change by Imaging with a New CETP Inhibitor) investigated the effect of treatment with the CETP inhibitor torcetrapib on carotid atherosclerosis progression in patients with mixed dyslipidaemia. In this double-blind, multicentre study, 752 patients completed an atorvastatin run-in period and were then randomized to treatment with torcetrapib 60 mg daily (n=377) or placebo (n=375), in addition to atorvastatin. Atherosclerosis progression was assessed by measurement of carotid-intima media thickness (CIMT) by ultrasonography at 6-month intervals for up to 24 months. The primary endpoint was the yearly rate of change in maximum CIMT of 12 carotid segments.

In total, data from 683 patients with baseline and at least one follow-up CIMT measurement were evaluated. After a mean follow-up of 22 months, there was no significant difference between the torcetrapib combination and atorvastatin treatment groups with respect to the change in maximum CIMT (0.025, SD 0.005 mm/year vs. 0.03, SD 0.005 mm/year with atorvastatin monotherapy, difference -0.005, 95% CI -0.018 to 0.008 mm/year, p=0.46). This was despite a 63% increase in HDL cholesterol levels and a 18% decrease in LDL cholesterol levels with torcetrapib combination treatment, relative to atorvastatin monotherapy.

Notably, there was also a significant increase in systolic blood pressure in patients treated with torcetrapib combination treatment (6.6 mmHg vs. 1.5 mmHg with atrovastatin only, p<0.0001). Increases in systolic blood pressure have also been reported in the previous torcetrapib clinical trials (RADIANCE 1, ILLUSTRATE and ILLUMINATE).

The development of torcetrapib has now been terminated.

Reference

1. Bots ML, Visseren FL, Evans GW et al. Torcetrapib and carotid intima-media thickness in mixed dyslipidemia (RADIANCE 2 study): a randomised, double-blind trial. Lancet 2007;370:153-60.