

## Newsletter-Comment (June 2010)

### *ACCORD Trial Blood Pressure Arm Results*

You will recall the results of the ACCORD trial of intensive vs less-intensive glycaemic control in type 2 diabetics at high risk of cardiovascular events<sup>1</sup>. This showed, somewhat disappointingly that participants randomised to achieve a HbA1C < 6% had more cardiovascular events than those targeted to achieve a HbA1C around 7% and this arm of the trial.

There was another arm of the trial comparing intensive vs standard blood pressure control in type 2 diabetics at high risk of cardiovascular events. The results of this arm were published on 29 April 2010<sup>2</sup>. 4733 participants were randomised to achieve a target systolic BP < 120mmHg or < 140mmHg. Primary composite outcome was non-fatal MI, nonfatal stroke, or death from cardiovascular causes, and mean follow-up was 4.7 years.

Mean achieved systolic blood pressure in the intensive group was 119.3mmHg and 133.5mmHg in the standard care group.

The annual rate of the primary outcome was 1.87% in the intensive therapy group and 2.09% in the standard therapy group which was not statistically significant. The annual rates of stroke, though, a prespecified secondary endpoint were statistically lower in the intensive therapy group (0.32% vs 0.53%). Treatment side effects were significantly more common in the intensive therapy arm.

What do we take from this? Are is our current blood pressure target in diabetics (<130/80)<sup>3</sup> too low? Does the stroke benefit warrant targeting systolic BP < 120 in all type 2 diabetics? Keep in mind that there was no statistical difference in the primary composite outcome, and basing treatment recommendations on secondary outcomes or subgroup analyses carries some risk.

Further studies are required to clearly elucidate the optimal limits of blood pressure lowering in both diabetics and non-diabetics, but on the basis of this study alone I would not recommend a general change in practice.

1. *The Action to Control Cardiovascular Risk in Diabetes Study Group. Effects of intensive glucose lowering in type 2 diabetes. The ACCORD Study Group. N Engl J Med 2008;358:2545-2559.*
2. *Effects of Intensive Blood-Pressure Control in Type 2 Diabetes Mellitus. The ACCORD Study Group. N Engl J Med.2010;362:1575-1585*
3. *Chobanian AV, Bakris GL, Black HR et al. The Seventh Report of the National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure:The JNC 7 Report. JAMA.2003;289:2560-2572*