

Similar benefits with all major classes of antihypertensives

All major classes of antihypertensive drugs provide *'the same overall protection against cardiovascular complications'*, according to researchers from Belgium. Furthermore, it appears that the benefits of antihypertensives can be solely attributed to the reduction in systolic BP, they say.

The researchers retrospectively analysed outcome data from 9 trials that involved 33 325 patients assigned to treatment with diuretics or β -blockers and 29 280 patients assigned to treatment with calcium antagonists, ACE inhibitors or α -blockers.

Treatment with ACE inhibitors or calcium antagonists was as effective as treatment with diuretics or β -blockers in reducing overall cardiovascular risk and cardiovascular mortality; however, calcium antagonists appeared significantly more effective in lowering the risk of stroke (difference in odds ratio 13.5%; 95% CI 1.3–24.2) and significantly less effective in reducing the risk of myocardial infarction (19.2%; 3.5–37.3).

The researchers also performed a meta-regression analysis of 27 trials involving 136 124 patients treated with antihypertensives. This revealed that the benefits in cardiovascular outcome attributed to antihypertensive treatment with diuretics, β -blockers, calcium antagonists and ACE inhibitors could be explained by the lower systolic BP achieved with such treatment, compared with that achieved in the reference group.*

The findings of the meta-regression analysis *'emphasise the desirability of blood pressure control'*, conclude the researchers.

* The reference group in the individual studies received either another class of antihypertensive, placebo or no treatment.

Staessen JA, et al. Cardiovascular protection and blood pressure reduction: a meta-analysis. *Lancet* 358: 1305-1315, 20 Oct 2001 800876462