

Hypertension study proves treatment with RAAS inhibitors saves lives

Treatment with an ACE inhibitor for lowering high blood pressure showed a significant mortality reduction in patients with a high prevalence of hypertension, according to a report published in the European Heart Journal

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Sophia Antipolis, 18 April 2012 – Treatment with an ACE inhibitor for lowering high blood pressure showed a significant mortality reduction in patients with a high prevalence of hypertension, according to a report published in the European Heart Journal, the flagship journal of the European Society of Cardiology.

In the study, 20 different trials including nearly 160,000 randomly selected patients with high blood pressure were treated with renin-angiotensin-aldosterone system (RAAS) inhibitors or control treatment, such as placebo or normal care with a mean follow up of 4.3 years. RAAS inhibitors showed a 5% reduction in all-cause mortality and a 7% reduction in cardiovascular mortality when compared with control antihypertensive therapy.

However, in a stratified study according to the class of drug, the overall all-cause mortality reduction was a result of the beneficial effect of the class of ACE inhibitors, showing a significant 10% reduction, whereas the AT1 receptor blockers (ARBs) had no reduction.

"The guideline recommended goal of antihypertensive treatment is mortality reduction, however this is the first study that scientifically evaluates the value of RAAS inhibitors on mortality in their main indication of hypertension," said lead author Prof Laura van Vark, Department of Cardiology at Erasmus in Rotterdam, Netherlands.

Because there are usually no symptoms associated with high blood pressure, most patients don't realize they have the disease, nor do they know about medication needed. Treatments for high blood pressure may cause side effects, making it a challenge to patients' adherence. This is why there is a strong need for medications with beneficial effects on mortality.

Hypertension is a major risk factor for cardiovascular disease, claiming nearly eight million lives worldwide each year, which represent 13% of all deaths. Medication and healthy lifestyle modifications, such as no smoking and regular physical activity, generally lead to better blood pressure readings, however for many patients medication is also still necessary.

For more information about hypertension from the European Society of Cardiology, visit **Guidelines**.

Notes to editor

The European Heart Journal is the flagship journal of the European Society of Cardiology (http://www.escardio.org). It is published on behalf of the ESC by Oxford Journals, a division of Oxford University Press. Please acknowledge the journal as a source in any articles.

References

"Angiotensin-converting enzyme inhibitors reduce mortality in hypertension: a meta-analysis of randomized clinical trials of renin–angiotensin–aldosterone system inhibitors involving 158 998 patients."

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ESC Guidelines for the management of arterial hypertension

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