DIABETES

**ADD-ON ALISKIREN
HAS LIMITED BENEFIT**

A trial of the renin inhibitor aliskiren to treat cardiovascular and renal complications in patients with type 2 diabetes mellitus (T2DM) has been ended prematurely after the second interim efficacy analysis showed that use of aliskiren as an add-on to first-line interventions resulted in a higher frequency of adverse events than use of a placebo.

Inhibitors of the renin–angiotensin–aldosterone system are routinely prescribed to reduce blood pressure. Dual targeting of this system has been investigated in a number of studies, but treatment with an angiotensin-converting-enzyme (ACE) inhibitor and an angiotensin-receptor blocker has been shown to increase the risks of experiencing hyperkalaemia or hypotension. Aliskiren is effective alone as an antihypertensive drug and previous studies have shown that aliskiren used as an add-on to an angiotensin-receptor blocker reduces albuminuria to a greater extent than does treatment with an angiotensin-receptor blocker alone. As an add-on to an ACE inhibitor or an angiotensin-receptor blocker, aliskiren has been shown to improve surrogate markers of adverse cardiovascular and renal outcomes.

In this double-blind, multicentre study, 8,561 patients who were already being treated with an ACE inhibitor or an angiotensin-receptor blocker were randomized to receive either the renin-inhibitor aliskiren or a placebo as add-on therapies. Patients were aged ≥ 35 years, and had T2DM as well as albuminuria or cardiovascular disease. The primary end point was a composite of fatal and nonfatal renal and cardiovascular events.

Blood pressure increased in both groups, but the increase was smaller in the group receiving aliskiren than in the group receiving a placebo. However, the primary endpoint occurred more frequently in the group receiving aliskiren than in the group receiving placebo (18.3% versus 17.1%, respectively). Additionally, death from cardiovascular causes, cardiac arrest requiring resuscitation, myocardial infarction and stroke all occurred more frequently in the aliskiren group.

The benefits of using aliskiren as an add-on therapy to an ACE inhibitor or an angiotensin-receptor blocker do not seem to outweigh the adverse effects of the drug.

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