Drugs 2002; 62 (9): 1365-1366
0012-6667/02/0009-1365/$30.00/0

Gliclazide Modified Release

A Viewpoint by Andrew Harrower

Department of Medicine and Endocrinology, Monklands Hospital, Airdrie, Scotland

A new preparation of the sulphonylurea gliclazide has been developed incorporating the molecule in a hydrophilic matrix which ensures a progressive release of drug over a 24-hour period. The gliclazide modified release (MR) preparation produces effective plasma concentrations of gliclazide within the optimum therapeutic range throughout a 24-hour period, but with lower nocturnal concentrations which mimic the glycaemic profile in patients with type 2 diabetes mellitus. The more efficient drug delivery allows a lower dose, 30mg, to be used which is equivalent to 80mg of the current gliclazide product.

An international multicentre trial has established that the new gliclazide MR preparation is as effective as standard gliclazide in the treatment of patients with type 2 diabetes mellitus, with good acceptability and a low incidence of adverse effects. A variety of patients were studied, including drug-naive subjects with inadequate glycaemic control on dietary measures alone and patients with poor control on other antidiabetic drugs. The trial also confirmed that patients with diabetes mellitus could be transferred directly from standard gliclazide therapy to the equivalent dose of gliclazide MR with no adverse effects, and that the preparation could be given without untoward effects to elderly patients including those with impaired renal function. Compliance with drug treatment is reported to be better with once-daily preparations, and this could be an added benefit with gliclazide MR.

By providing more efficient delivery in a once-daily dose of an established and effective antidiabetic drug this new preparation, gliclazide MR, could help to improve overall compliance, and therefore glycaemic control, in patients with type 2 diabetes mellitus in whom sulphonylurea therapy is appropriate. ▲