

# CLAHRCBITE

Brokering innovation through evidence

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## Do sulphonylureas still have a place in clinical practice?



### Results

Recent studies confirm efficacy, cardiovascular safety and cost-effectiveness of sulphonylurea therapy although there is increased hypoglycaemia risk and weight gain.

### Who needs to know?

Healthcare professionals prescribing glucose-lowering therapy including sulphonylureas and also patients who take this medication.

## What did we do:

We searched for articles between 1942 and 2017 on sulphonylurea therapies and wrote a narrative review. We discussed the history, mechanism of action, effects on glycaemic control, hypoglycaemia and weight based on clinical trial and observational study data. We discussed cardiovascular and mortality outcomes and explored novel insights into gene polymorphisms and tissue selectivity as well as practical considerations when prescribing these agents especially in patient groups like the elderly.

## What we found and what does this mean:

Although adverse cardiovascular outcomes in some observational studies have raised concerns about sulphonylureas, findings from relatively recent, robust, and high-quality systematic reviews have indicated no increased risk of all-cause mortality associated with sulphonylureas compared with other active treatments. There is some increased risk of hypoglycaemia and weight gain but less so than with insulin. The effectiveness, affordability, and safety of sulphonylureas are particularly important considerations when prescribing glucose-lowering therapy.

## What next:

Results of ongoing head-to-head studies with new drugs, such as the comparison of glimepiride with linagliptin in the CAROLINA study and the comparison of various therapies (including sulphonylureas) for glycaemic control in the GRADE study, will determine the place of sulphonylureas in glucose-lowering therapy algorithms for patients with type 2 diabetes.

## Evidence:

Khunti K, Chatterjee S, Gerstein HC, Zoungas S, Davies MJ. Do sulphonylureas still have a place in clinical practice? *Lancet Diabetes Endocrinol.* 2018. [http://dx.doi.org/10.1016/S2213-8587\(18\)30025-1](http://dx.doi.org/10.1016/S2213-8587(18)30025-1)

## What is NIHR CLAHRC EM?

NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) are collaborations between the NHS, universities and local organisations. Our goals are to conduct applied health research across the East Midlands and translate our research findings into improved outcomes for the public.

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