

Canagliflozin, dapagliflozin and empagliflozin monotherapy for treating type 2 diabetes: systematic review and economic evaluation

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Plain English summary

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Plain English summary

In type 2 diabetes, it is important to get blood glucose levels back down to as near normal as possible to reduce the risk of long-term complications such as damage to eyesight and kidneys. The flozins are the newest type of oral drugs. They work by increasing the amount of glucose lost in the urine, which leads to calorie loss and some weight loss. However, they are much more expensive than older drugs.

Treatments for diabetes may increase or decrease a patient's weight. One of the main uncertainties is how large are any patient benefits from the direct impact of weight changes.

If a few kilograms gained or lost have little or no impact upon a patient's day-to-day living, there are few if any patient benefits from the flozins and sitagliptin over the more traditional treatments of pioglitazone and sulfonylureas (SUs) such as gliclazide. The flozins and sitagliptin cost around £400 more each year than the traditional treatments. So in monotherapy compared with gliclazide, pioglitazone or repaglinide, the flozins represent poor value.

Not everyone can take the older drugs because of hypoglycaemia (with SUs) or risks of heart failure and fracture (with pioglitazone). If patients who would receive flozins would otherwise be treated with sitagliptin or similar drugs, the additional cost of the flozins is only around £40 more each year. This means that fewer treatments elsewhere need to be reduced to fund the flozins, and that the flozins are good value for patients as a whole.

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