

# Popular diabetes drugs linked to increased risk of heart failure and death

December 4 2009

---

Sulphonylureas, a type of drug widely used to treat type 2 diabetes, carries a greater risk of heart failure and death compared with metformin, another popular antidiabetes drug.

The findings, published in the *British Medical Journal* today, suggest clinically important differences in the cardiovascular safety profiles of different antidiabetes drugs, and support recommendations that favour metformin as first-line therapy for type 2 diabetes.

Type 2 diabetes affects more than 180 million people worldwide and is associated with at least a two-fold increased risk of death, mainly from cardiovascular disease. Oral antidiabetes drugs are widely used to help control blood sugar levels, but there are concerns that some may increase [cardiovascular risk](#).

So a team of researchers led by Professor Paul Elliott from Imperial College London set out to investigate the risk of heart attack ([myocardial infarction](#)), congestive heart failure and death from any cause associated with prescription of different types of oral antidiabetes drugs.

They used data from 91,521 men and women (average age 65 years) with diabetes included in the UK General Practice Research Database between 1990 and 2005. Factors that could potentially affect the results were taken into account.

Metformin was the most commonly prescribed drug (74.5% of patients),

followed by second generation sulphonylureas (63.5%).

Compared with metformin, both first and second generation sulphonylureas were associated with significant (up to 61%) excess risk of all cause mortality, and second generation sulphonylureas with up to 30% excess risk of [congestive heart failure](#).

Another class of antidiabetes drugs called thiazolidinediones were not associated with risk of heart attack, and there was significantly (up to 39%) lower risk of all cause mortality associated with pioglitazone use compared with metformin.

"The sulphonylureas, along with metformin, have long been considered the mainstay of drug treatment for [type 2 diabetes](#). Our findings suggest a relatively unfavourable risk profile of sulphonylureas compared with metformin," say the authors.

As such, they support the recommendations of the American Diabetes Association and International Diabetes Federation that favour metformin as the initial treatment for type 2 [diabetes](#).

Source: British Medical Journal ([news](#) : [web](#))

Citation: Popular diabetes drugs linked to increased risk of heart failure and death (2009, December 4) retrieved 3 May 2024 from <https://medicalxpress.com/news/2009-12-popular-diabetes-drugs-linked-heart.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--