

## Diabetes Drug rosiglitazone (Avandia®) Associated with Heart Failure and Death

People taking pioglitazone (Actos®) had a 23% lower risk of heart failure and a 14% lower risk of death than people taking rosiglitazone (Avandia®).

### What does this mean?

- Rosiglitazone (Avandia®) and pioglitazone (Actos®) are oral drugs used to treat people with Type II diabetes.
- If 100 people took rosiglitazone (Avandia®) instead of pioglitazone (Actos®) for a year, our research suggests that one additional person would experience heart failure, a heart attack, or would die.

### Clinical Implications

Preferentially prescribe pioglitazone (Actos®) over rosiglitazone (Avandia®) for patients with Type II diabetes.

### How do we know this?

These findings are the results of a population-based study in which the ODPRN tracked the health records of Ontario residents over the age of 65 who had Type II diabetes, had been prescribed rosiglitazone (Avandia®) or pioglitazone (Actos®) for the first time between 2002 and 2008, and were not taking insulin at the same time. Patients taking rosiglitazone (Avandia®) (22,785) were matched to similar patients taking pioglitazone (Actos®) (16,951). People taking pioglitazone (Actos®) had a 23% lower risk of heart failure (hazard ratio of .77, 0.69 to 0.87) and a 14% lower risk of death (hazard ratio of .86, 0.75 to 0.98) than people taking rosiglitazone (Avandia®) within a year of their first heart attack.

Juurlink DN, Gomes T, Lipscombe LL, Austin PC, Hux JE, Mamdani MM. Adverse cardiovascular events during treatment with pioglitazone and rosiglitazone: population based cohort study. *BMJ* 2009; 339:b2942.

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