ODPRN
ONTARIO DRUG POLICY RESEARCH NETWORK

RESEARCH MINUTE

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.

Policy Implications

Funding guidelines for the prescribing of thiazolidinediones for patients with Type II diabetes should be changed to reflect the evidence that pioglitazone (Actos®) is recommended over rosiglitazone (Avandia®), and specifically that rosiglitazone (Avandia®) should not be prescribed.

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) and a 14% lower risk of death (hazard ratio of .86) 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.