

## Use of Fibrates to Lower Cholesterol May Affect Kidney Function Among Elderly

**Elderly people taking fibrates to control their cholesterol face an increased risk for hospitalization for an elevated serum creatinine.**

### What does this mean?

- Fibrates and ezetimibe are drugs used to treat high cholesterol.
- Compared to ezetimibe users, fibrate users are more likely to be hospitalized for an increase in serum creatinine levels and to see a nephrologist.
- Having chronic kidney disease is associated with an increased likelihood of experiencing these outcomes.

### Clinical Implications

- When prescribing fibrates to older patients, consider starting the prescription at a low dose and closely monitoring renal function, particularly for patients with existing chronic kidney disease.

### How do we know this?

These results were drawn from a population-based study in which the ODPRN examined Ontario residents aged 66 years and older who were prescribed fibrates or ezetimibe for the first time between 2004 and 2008, and who were not suffering from end-stage kidney disease. Ezetimibe was used as a control as it is also used to treat cholesterol but is known not to change kidney function. The health records of patients who began taking fibrates (19,072) and ezetimibe (61, 831) were tracked in linked health databases for 90 days to determine health outcomes related to kidney function and care. Statistical analyses comparing the two groups of patients were conducted to determine differences in health outcomes between the populations. New users of fibrates were 2.4 times more likely to be hospitalized within 90 days for increased creatinine levels in their blood (an indicator of impaired kidney function) than people who are taking ezetimibe (OR 2.4 [95% CI, 1.7 to 3.3]), and 30 times more likely to experience a 50% increase in creatinine levels than new users of ezetimibe over a period of 90 days (OR 29.6 [95% CI, 8.7 to 100.5]). New users of fibrates with chronic kidney disease had a 3.4 times higher risk of being hospitalized than new users of fibrates who do not have chronic kidney disease over a period of 90 days (OR 3.4 [95% CI 2.2 to 5.1]).

Zhao YY, Weir MA, Manno M, Cordy P, Gomes T, Hackam DG, Juurlink DN, Mamdani M, Moist L, Parikh CR, Paterson JM, Wald R, Yao Z, Garg AX. New Fibrate Use and Acute Renal Outcomes in Elderly Adults: A Population-Based Study. *Annals of Internal Medicine* 2012 ; 156 (8): 560-569

*This Research Minute was created by the ODPRN.*

*The ODPRN is funded by the Ontario Drug Innovation Fund*

*to respond rapidly and directly to policy-makers' needs for relevant research.*

*For more information about the ODPRN please visit our website [www.odprn.ca](http://www.odprn.ca)*