

The ODPRN conducted a population based study examining the use of inhaled tobramycin since the introduction onto the ODB formulary in 2006. Key information, policy recommendations, and details from the study are highlighted.

## Use of Inhaled Tobramycin has Increased Significantly with Evidence of Considerable Off-Label Use

*Inhaled tobramycin claims have increased three-fold since 2006 with only half of prescriptions dispensed on-label to patients with cystic fibrosis*

### Why did we do this study?

Since the introduction of inhaled tobramycin onto the ODB formulary, trends in overall utilization as well as potential off-label use is unknown.

### What were we investigating?

We examined the use of inhaled tobramycin as well as changes in prescribed indication over time.

### Where can I find more information?

The full study is available [here](#)

### About ODPRN

We leverage cutting-edge research methodology and rapidly incorporate findings into policy reports for decision-makers on real-world drug utilization, safety, effectiveness, and costs.

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### KEY POINTS

- Inhaled tobramycin solution is indicated for the management of *pseudomonas aeruginosa* in patients with cystic fibrosis (CF) and has been available as general benefit through the Ontario Drug Benefit (ODB) formulary since 2006. Since its introduction, there has been some concern around potential off-label use, particularly in patients with chronic obstructive pulmonary disease (COPD)
- Since the introduction of inhaled tobramycin onto the ODB formulary in 2006, prescription claims have increased approximately 3-fold from 86 claims to 261 claims. Half (52%) of all prescriptions were dispensed to patients with CF, and approximately 40% of prescriptions were dispensed to individuals who did not have a diagnosis of CF but had a diagnosis COPD.

### POLICY IMPLICATIONS

- Policy-makers may want to consider implementation of stricter reimbursement criteria designed to restrict tobramycin use to CF patients.

### STUDY DETAILS

- The ODPRN conducted a repeated cross-sectional study examining quarterly prescription claims for inhaled tobramycin among individuals 65 years of age and older from April 2007 to March 2015.
- Inhaled tobramycin prescription claims increased approximately 203% from 86 prescriptions in the second quarter (Q2) of 2007 to 261 prescriptions in the first quarter (Q1) of 2015.
- Approximately half of all prescriptions (52%, n=3,042 of 5,853) dispensed over the study period were provided to patients with CF. A large proportion of prescriptions (40%, n=2,350) were dispensed to individuals who did not have a diagnosis of CF but had a diagnosis of COPD. A small proportion of prescriptions (7.8%; n=461) were dispensed to individuals who did not have a diagnosis of either CF or COPD.