

# Projected Impact of Biosimilar Substitution Policies on Drug Use and Costs in Ontario

## Biologics

- Complex compounds derived from living organisms
- Important treatment options across a number of medical indications
- Very expensive

## Estimated cost of common biologics

(infliximab, etanercept and adalimumab)  
**\$925.3M** between 2018-2020

## Biosimilars

- No clinically meaningful difference to the innovator (original) biologic
- Becoming more widely available
- Significantly less expensive

## Uptake of biosimilars is low

only **10-15%** are receiving biosimilars for rheumatic conditions or inflammatory bowel disease (IBD)

ODPRN used real-world data in Ontario to estimate the impact of different biosimilar policy options on:



Total medication costs, and



Number of patients impacted

## Potential biologic policies for rheumatic conditions or IBD



### Mandatory Switching

- Everyone previously prescribed an innovator biologic is mandated to switch to a biosimilar



### New User Substitution Enforcement of Current Ontario Policy

- Biosimilars are mandatory for people newly starting therapy when a biosimilar is available
- Existing innovator biologic users are not required to change therapy



### Additional Considerations

- Negotiating lower biosimilar prices i.e. 25-50% of innovator price
- Account for recent introduction of biosimilars for adalimumab
- Considering biosimilars for insulin glargine (indicated for diabetes)

## Potential 3 year (2018-2020) savings\* range from:

\*Depending on the policy implemented and negotiated biosimilar prices

**\$34.2 M** New User Substitution  
For rheumatic conditions and IBD only;  
excluding adalimumab



**\$645.9 M** Mandatory Switching  
With biosimilars priced at 25% of innovator biologics

## Potential number of patients impacted

**757 to 115,895**

depending on the policy selected



## Important considerations

### Monitor patient outcomes

- Support patients and monitor clinical consequences of any changes and stability of disease
- Assess changes in costs to public payers and patients
- Understand impact on quality of life

### Out-of-pocket expenses

Allow time for biosimilar manufacturers to introduce similar patient support programs as innovator biologics



## For more information

Gomes, T., McCormack, D., Kitchen, S., Paterson, M., Mamdani, M., Proulx, L., Bayliss, L., & Tadrous, M. (2021). Projected Impact of Biosimilar Substitution Policies on Drug Use and Costs in Ontario, Canada: A cross-sectional time series analysis. CMAJ Open.