Inflectra and Remicade Use and Cost Under Canadian Provincial Drug Plans In 2016



Cristiano S. Moura¹, Denis Choquette², Gilles Boire³, Vivian P. Bykerk⁴, Carter Thorne⁵, Walter P. Maksymowych⁶, Peter Lakatos⁷, Talat Bessissow⁷, Larry Svenson⁷, Laura Targownik⁸, Waqqas Afif^{1,7},Sasha Bernatsky^{1,7},

CAN-AIM

6,314 (49)

4,228 (33)

1,686 (13)

676 (5)

¹Research Institute of the McGill University Health Centre, ²University of Montreal Hospital Research Centre (CRCHUM), ³Universite De Sherbrooke, ⁴Hospital For Special Surgery, ⁵University Of Toronto, ⁶University Of Alberta, Edmonton, Canada, ⁷McGill University, ⁸University Of Manitoba,

Background

- ➤ Biosimilars hold the potential to improve access to needed therapies at a reduced cost.
- ➤ Inflectra (infliximab) was the first biosimilar for inflammatory bowel disease (IBD) and arthritis approved by Health Canada.
- ➤ Each Canadian province has a publicly financed drug plan for the entire province (e.g. in Manitoba, British Columbia) or subsets (e.g. seniors, those without private insurance)
- ➤ We assessed recent use of Remicade and Inflectra (its biosimilar) within Canada

Methods

- ➤ The National Prescription Drug Utilization Information System (NPDUIS) holds public drug plan data from across Canada except Quebec
- ➤ NPDUIS data from 2016 were obtained, aggregated by province, sex, and age groups.
- ➤ We described patients for whom the public drug plan/program accepted at least part of ≥1 claims for Remicade or Inflectra, either towards a deductible or as payment.
- ➤ We calculated total number of claims and recorded amounts paid by public drug plans (drug cost and pharmacy fees).

Disclosures

CS. Moura, None; D. Choquette, None; G. Boire, (Merck, BMS, Pfizer-8), (Amgen, BMS, Eli Lilly, Janssen, Pfizer, Merck, Amgen, Abbvie, Novartis-9); VP. Bykerk, Amgen, Pfizer, UCB, BMS, Sanofi Genzyme, Gilead-5; C. Thorne, (Amgen, AbbVie, Pfizer- 2, 5, 9), (Medexus/Medac- 2, 5, 8), (Hospira, Sanofi Genzyme-5, 9), (Centocor- 5), (CaREBiodam, Celgene Corporation, Eli Lilly, Janssen, Merck, Novartis, UCB- 9); WP. Maksymowych, AbbVie, Amgen, Eli Lilly, Janssen, Merck, Pfizer, Synarc, Sanofi, UCB Pharma- 2, 5, 8; P. Lakatos, None; T. Bessissow, None; L. Svenson, None; L. Targownik, None; W. Afif, None; S. Bernatsky, None.

Results

- ➤ In 2016, there were 218 beneficiaries with ≥1 Inflectra dispensation, with a total of 856 claims approved.
- ➤ During this time, 12,912 individuals were dispensed Remicade, (a total of 80,862 approved claims).
- Stratified information (sex, age group, province financing the claim) was available for 184 Inflectra and 12,904 Remicade users.
- ➤ There was a significantly higher proportion of seniors and women who were recipients of Inflectra versus Remicade. This may be due to the fact that in Ontario (the most populous Canadian province) only seniors have comprehensive drug coverage.
- ➤ The cost per claim for Remicade was \$4,471 (versus \$1,934 for Inflectra).
- ➤ If half of the Remicade claims had been Inflectra instead, the cost difference would have been over \$102.5 million. This does not consider undisclosed rebates/discounts which may have been in place.

Limitations

- > The findings are aggregate and for a single year
- > No data on indication (rheumatic vs. IBD)
- > We were unable to differentiate between prior/new users.
- No analyses of drug persistence (which may reflect safety and effectiveness) were possible
- Analyses do not consider undisclosed rebates/discounts which may have been in place.

Inflectra and Remicade in selected jurisdictions*, 2016		
	Inflectra	Remicade
Number of beneficiaries	218	12,912
Number of accepted claims	856	80,862
Program paid amount	\$1,655,245	\$361,502,867
Cost per claim	\$1934	\$4471
Female sex N (%) beneficiaries	117 (64)	6,304 (49)
Age groups, beneficiaries N (%**)		

42 (23)

71 (39)

49 (27)

22 (12)

Table 1 –Program spending and patient characteristics of

*Ontario, British Columbia, Alberta, Newfoundland/ Labrador, New Brunswick, Saskatchewan, Manitoba ** Percent exceeds 100 due to rounding

Conclusions

0-44

45-64

65-74

75+

- ➤ In 2016, there were 12,912 Remicade users and 218 Inflectra users in Canada, exclusive of Quebec; Remicade's recorded price tag was over \$361.5 million, not including rebates/discounts.
- ➤ Though cost savings of biosimlars are potentially large, our estimates do not account for other considerations, such as safety and effectiveness, and rebates/discounts offered by drug companies.

Funding

Drug Safety and Effectiveness Network (DSEN)

