

# Impact of PMPRB new reference countries on drug prices in Canada, A comparison of current and anticipated list prices for top drugs in the country

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## Background

In 2017, the Government of Canada decided to implement the most significant reforms in drug pricing since 1987, by amending the regulations of Patented Medicine Prices Review Board (PMPRB)<sup>1</sup>. This initiative was motivated by constantly rising innovative medicine prices. The objective of this reform is to reduce medicine prices making them more affordable for Canadian patients. Several consequences, both positive and negative are anticipated. On the positive side, prescribed drug prices will be lower, but on the other hand, there will be restricted access or refusal to launch new medicine.

## Objective

To assess the impact on list prices in Canada of modifying the basket of reference countries used by the PMPRB

## Methodology

- Fifteen therapeutic classes were selected from the 2019 CIHI report on prescribed drug spending in Canada in the category: “Top drug classes by total program spending (TPS)”<sup>2</sup>;
- Ontario list prices were used as Canadian prices for the analysis, and international prices were retrieved from each country’s drug price platform;
- The estimated impact on list prices was calculated as the difference between current list prices and projected median international prices (MIP) under the new regime.

## Results & Discussion

- **42 brand names drugs** (100 DINs) still under the PMPRB’s jurisdiction were analysed;
- An overall weighted average list price **reduction of 28.4%** is expected with the modification of reference countries.

A general decrease in prices was observed for all therapeutic classes caused by the change in reference countries used by the PMPRB. Variability was observed across classes, but expected reductions are as high as 68.4% (Figure 1). The analysis does not consider other measures included in the new regulation and, as such, likely underestimates the total anticipated impact of the reform on list prices in Canada.

Besides the change in reference countries, an additional factor seemed to influence the price of medicines.

Figure 1. Difference between current list price and MIP per therapeutic classes

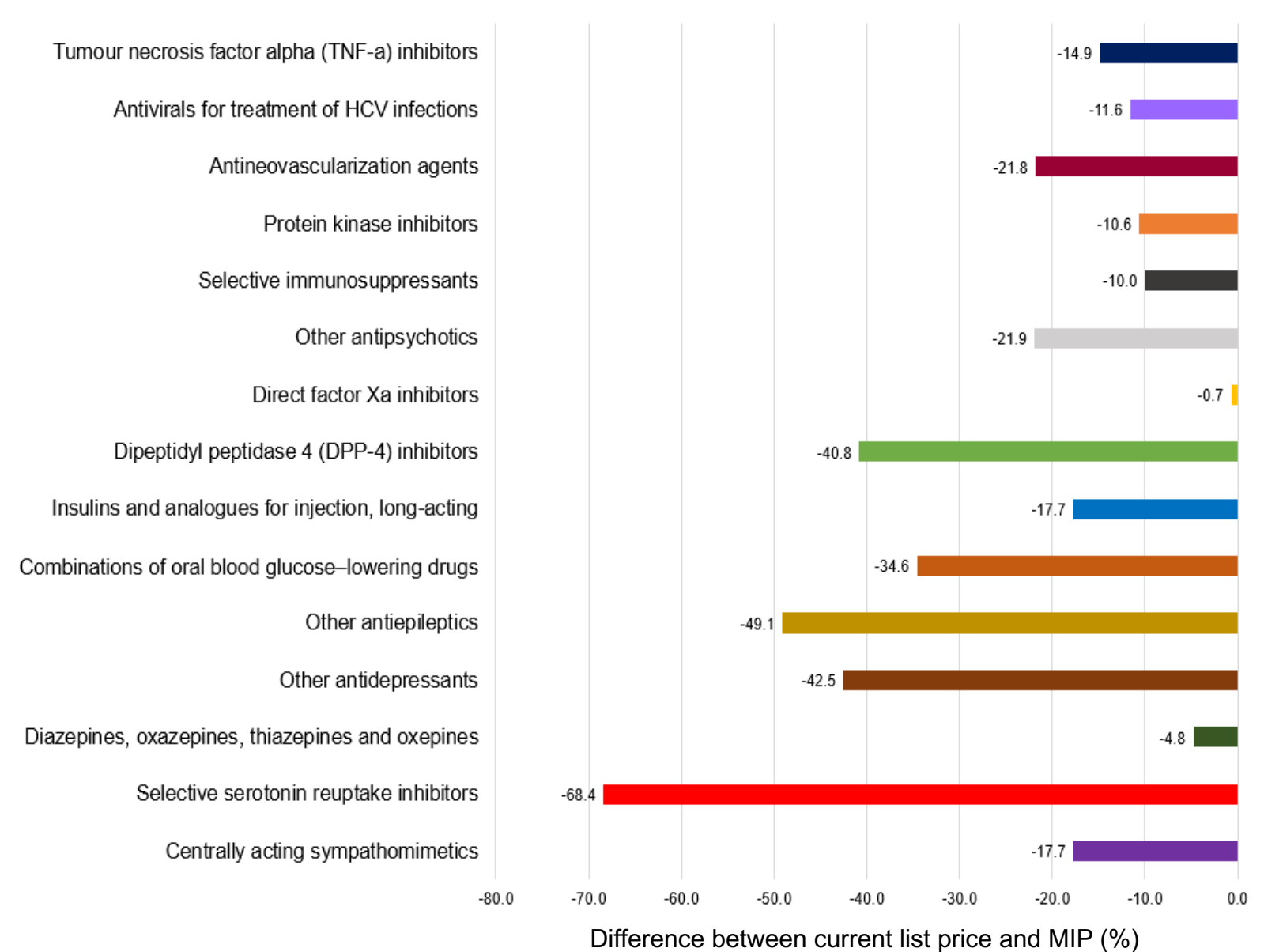
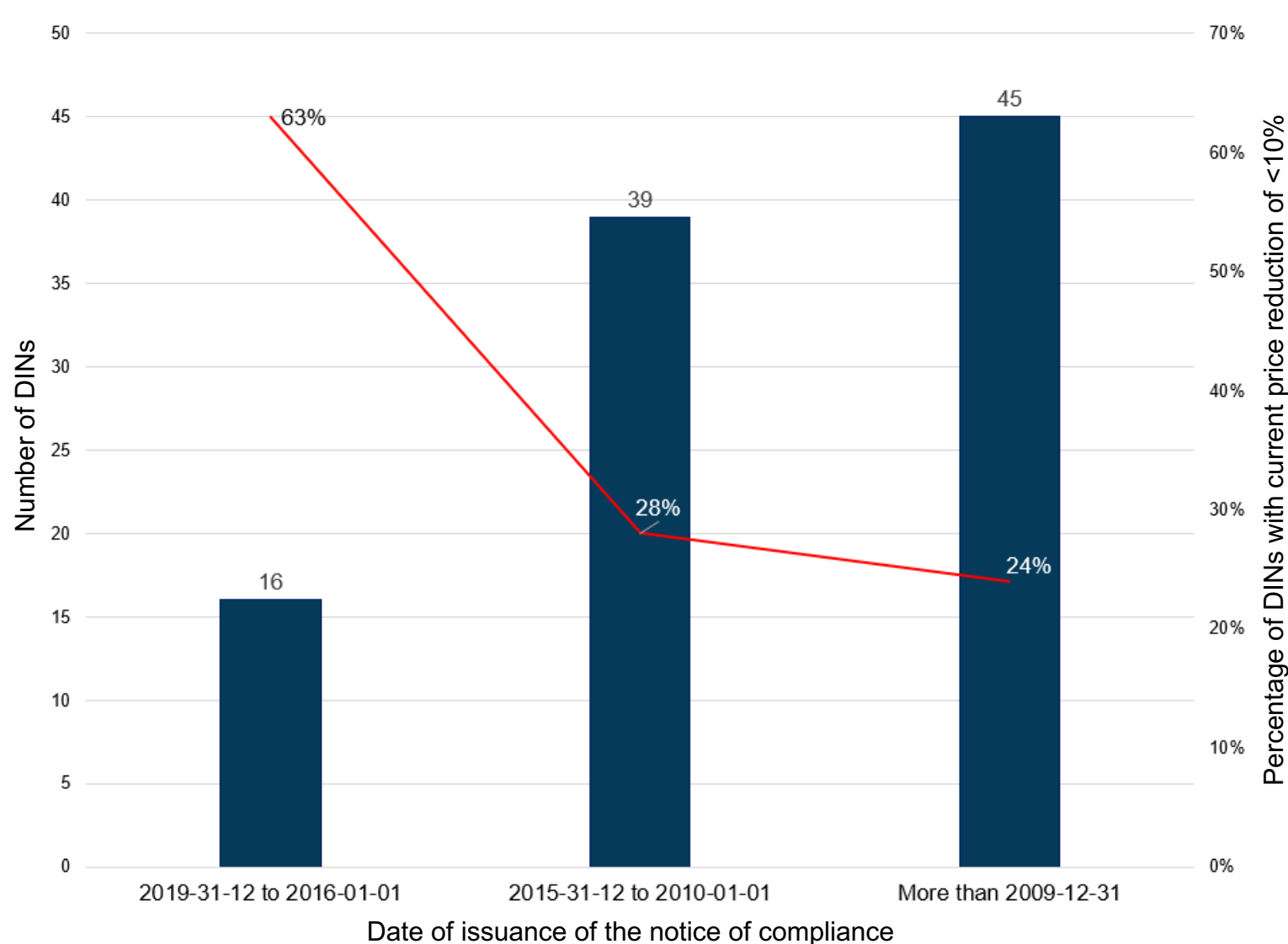


Figure 2. Impact of NOC date of issuance on the difference between current list price and MIP



A correlation was noticed between the anticipated price reduction following the reform and the date of issuance of the notice of compliance (NOC). Innovative medicines that have received an NOC in the past 5 years show price reduction of less than 10% in 63% of cases, compared to 28% for medicines that received NOC between 5 and 10 years (Figure 2). In a short period of time (10 years), pricing technique has radically evolved. Several factors may explain this concept<sup>3</sup>, for example, market saturation or limited therapeutic improvement.

An impact is perceived on pharmaceutical companies. They have refined the launch sequence and international pricing, now considering the referencing existing between countries (including, but not limited to, Canada).

## Conclusion

The impact of PMPRB reform will be major and will have serious repercussions on the pharmaceutical landscape. An overall reduction of 28.4% is expected. However, the analysis does not consider other measures included in the new regulation and, as such, likely underestimates the total anticipated impact of the reform on list prices in Canada. The analysis confirms that the objective of reducing innovative medicine prices will be achieved, but at what cost?

1. Health Canada. Government of Canada announces changes to lower drug prices and lay the foundation for national Pharmacare [online]. Ottawa (ON); 2019-09-08

2. Canadian Institute for Health Information. Prescribed Drug Spending in Canada, 2019: A Focus on Public Drug Programs — Top 100 Drug Classes, 2018 Data Tables. Ottawa (ON): CIHI; 2019.

3. Hawley, Julie. How Pharmaceutical Companies Price their Drugs [online]. USA; 2018-02-10. <https://www.investopedia.com/articles/investing/020316/how-pharmaceutical-companies-price-their-drugs.asp>

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