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Title	**Brand-name v. generic oral bisphosphonate medications patterns in Ontario over thirteen years; an ecologic study**
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Reviewer 1	
Name	Dr. Jennifer M. Nicholas
Institution	London School of Hygiene & Tropical Medicine
General comments and author response in bold	This paper examines the effectiveness of a policy of automatic substitution of generic for brand name bisphosphonates in Ontario, Canada. The paper is clearly written and addresses some important issues. The study was well conducted and I have no major concerns regarding the methods. However, there are some additional analysis that could add greatly to the value of the findings. 1. Linking prescriptions to the same person: All analysis examined the prescription rather than person level and this decision is not explained or justified, although it is stated as a limitation in the interpretation section (p9). If it is possible, linking prescriptions to the same person would add value to the study. In particular, it would allow examination of whether there is reduced adherence when patients are switched to generic rather than brand name. This is an important issue of interest that was raised in the introduction (p4). I accept that the dataset may have no ability to track individual patients. If so this should be explained in the methods, since many datasets do allow linking of prescriptions to individual patients. **We have changed the title of the manuscript to reflect that it is an "ecologic" study, not performed at the patient level. The reviewer raises a good point (regarding adherence), however several past studies have already shown that adherence decreases with generic drug substitution; therefore, this was not a focus of the current study. For this study we were interested in pharmacy dispensing trends, hence we chose an ecologic design. Certainly a future study could investigate patient level data and look more specifically at patient characteristics leading to continued brand-name drug use.** 2. Evaluation of cost savings: The interpretation concludes that the automatic substitution policy is "an effective strategy to control medication costs" (p9). However, no data is presented from the current study to indicate the extent of cost savings by switching from brand name to generic bisphosphonates. It would greatly add to the paper if some figures could be presented on this. For example, an upper limit of the cost saving could be presented by assuming that all generic prescriptions would have be for the brand name if the policy had not been implemented. Even just a table of the costs of the different medications would help inform the reader as to the importance of the substitution policy for cost containment. **We are limited in our ability to provide true costing information for specific drugs through ODB. The ODB program makes deals with pharmaceutical companies in order to get drugs at lower costs. Therefore, although we could provide information on what the general prices of drugs are, this would be misleading (in terms of how much ODB is actually saving) as only ODB has the real numbers they spend (and they do not make this information public). We know that the generic versions of bisphosphonates are less expensive (as per ODB's lowest cost substitution policy) however, we don't have access to exactly how much lower the cost if for ODB.** Some further comments are given below on by section of the manuscript. Introduction 3. If space allows, please clarify how the substitution policy is implemented. E.g. were physicians asked (or required) to prescribe only generic or was generic is swapped for brand name at the point of dispensing the medication in the pharmacy?

	Further description has been added. Including this line (introduction): **"The pharmacy therefore dispenses the lower cost generic drug (regardless of the drug name on the prescription), and is supposed to inform the patient of the substitution"** Methods 4. How were bisphosphonates for conditions other than osteoporosis excluded? **These were excluded based on dose. For example, an osteoporosis dose for risedronate is 35 mg per week; whereas, when used to treat Paget's disease the dose is 30 mg per day.** Results 5. The text states that Table 1 shows dates when generic bisphosphonates were first available in the ODB formulary (p6) but the title for Table 1 states "dates when generic bisphosphonates were first dispensed". Please clarify how these dates were determined. **Thank you for noting this inconsistency. The sentence in the Results section has been changed to:** **"The dates when generic bisphosphonates were first dispensed from the ODB formulary are summarized in table 1"** 6. I found Figures 1 and 2 quite hard to interpret, in terms of understanding how the the timing of changes from brand name to generic related to entry of the generic drug onto the market. Although a graphical representation of the data is helpful. The authors might consider presenting some data on % of prescriptions that were generic, perhaps at given time intervals after the generic became available? These numbers are given in the text for alendronate and risedronate (p6) but it would be helpful to have this information presented systematically for all of the medications. **We have added a "table 2" called: "Table 2 Proportion of oral bisphosphonates dispensed by ODB in generic form in the months following formulary availability"**
Reviewer 2	
Name	Dr. Alice Dragomir
Institution	McGill University, Montréal, Que.
General comments	The manuscript ''Brand-name vs. Generic oral bisphosphonate Medications Patterns over Thirteen Years'' is a descriptive study of all prescriptions of alendronate and risedronate dispensed to patients aged 65 years and over in Ontario Canada between January 1st 2001 and March 31th 2014. Data were obtained from administrative database. The objective of this study was to assess the real-world effectiveness of automatic generic substitution policies of bisphosphonates in Ontario. The main finding of this paper is that there is a rapid switch in pharmacy dispensing of brand-name oral bisphosphonates to the generic equivalent, when it became available. Following the introduction of the generic alternatives, small proportions of the brand-name equivalent medications continued to be dispensed. However, the authors noted a reduction in the number of generic drugs dispensed each time a new brand-name alternative was introduced to the market. The topic of this study is of interest as cost containment of health care expenses by applying different strategies is an important contemporary issue. Overall the manuscript is very well written. Please note that I have no conflict of interest in reviewing this manuscript. Thank you for your comments and review.