

Article details: 2018-0108	
Title	<b>Variable access for antiviral treatment of chronic Hepatitis b infection in Canada: a descriptive study</b>
Authors	Stephen E. Congly MD MSc, Mayur Brahmania MD MPH
<b>Reviewer 1</b>	Natalie Bunimov Wall
Institution	Health Canada Health Products and Food Branch, Biologics and Genetic Therapies Directorate (BGTD)
General comments (author response in bold)	<p>1. The authors mention that 70% of CHB carriers are from an immigrant population. It will help to mention the other predominant demographic groups who are affected by CHB. This information will emphasize the need for accessibility to appropriate publicly funded Hepatitis B treatments.</p> <p><b>Response: We have clarified the sentence and it now reads “In Canada, up to 480,000 individuals are infected mostly affecting individuals, or populations that have not received routine immunizations including immigrants from endemic countries, indigenous populations and street-connected individuals(2,3)” [Page 4].</b></p> <p>2. It is important to have a brief discussion and elaborate on the advantages of some antiviral treatments vs others in terms of: 1. Treatment success rates; 2. Regime convenience to patients; and 3. Major side effects that can affect treatment continuation and success in patient. This will justify why some antivirals are better used as first-line therapy over others.</p> <p><b>Response: Thank you. We have included a comment about this in the introduction. “Oral agents for hepatitis B are very well tolerated once daily medications but require indefinite use; older medications have high rates of resistance, which is not seen in tenofovir and entecavir. Interferon offers the advantage of fixed course of therapy but often is poorly tolerated and is not recommended in cirrhosis. For these reasons, tenofovir, entecavir and interferon are the preferred agents for treatment of hepatitis B(3,5–7) [Page 4].</b></p> <p>3. Arguments in tables 1 and 2 can be strengthened by the addition of WHO 2015 guidelines for the treatment of CHB. [Editorial Note: Your response to point 3 is most appropriate in the Interpretation section.]</p> <p><b>Response: Thank you for the suggestion. We have included the WHO guidelines in Table 1 and 2 and reference them in the Interpretation section.</b></p>
<b>Reviewer 2</b>	Matthew Feldman MPH
Institution	Alberta Health Services, Cancer Epidemiology and Prevention Research
General comments (author response in bold)	<p>1. The importance of the undermining issue in this paper cannot be overlooked. While the need for a federally approved and developed formulary is indeed a necessary component of the healthcare system, this issue of course will not be resolved through this piece. The report on the pricing of CHB treatment modalities is informative and well described although in reviewing the paper I was left questioning how this differed compared to the publicly available medications (if available) for HIV, TB and C. difficile that were mentioned in the Introduction to your paper. Is available HCV treatment disproportionate to the treatments available for other conditions you mentioned? Is the pricing of HCV medication that much less affordable than others not on the public formulary? [Editorial Note: You can consider additional pricing information, but since this is not a costing paper, you do not need to do a lot work. Please provide any citations, if you add information here about costs.]</p> <p><b>Response: Thank you. We have added a section in the discussion to compare the costs of HBV treatment to HIV and HCV [Page 12].</b></p> <p>2. These were just a couple of the questions I was left asking throughout that I believe could have been described in greater detail in order to give greater credence to the argument that HCV medication needs to be funded. While many chronic conditions are indeed in need of</p>

better coverage, what is there about HCV that makes it different from the general need for a better pharmacare program in Canada that would ultimately (and hopefully) cover many more chronic conditions, including HCV?

**Response: We believe the reviewer is referring to HBV and acknowledge the point being made. The fundamental difference between HBV and many other diseases is the HBV population is overrepresented by minority groups/populations. It is well known under-represented populations have less healthcare contact and service. 460,000 people in Canada have HBV, yet access is limited and not congruent with worldwide recommendations. Moreover, HBV seems to be the only infection we watch patients get sicker before giving them therapy. It is important to treat hepatitis B to reduce the risk of progressive fibrosis and cirrhosis, reduce the risk of developing liver cancer and reduce the risk of transmission of the virus which we have referenced in the introduction. Disease progression can be halted leading to markedly improved survival and quality of life.**