

8. Taylor P. France agrees lowest Sovaldi pricing in EU - Government brings cost of hepatitis C drug to €5,000 below list price, published 21st November 2014, PMLIVE website. http://www.pmlive.com/pharma_news/france_agrees_lowest_sovaldi_pricing_in_eu_618661. Accessed January 22, 2016.
9. Messori A. Spend less on drug enforcement and more on treating hepatitis C, say campaigners [response]. BMJ website. <http://www.bmj.com/content/346/bmj.f3428/r/689912>. Published March 11, 2014. Accessed November 1, 2014.
10. Shrank W, Lotvin A, Singh S, Brennan T. In the debate about cost and efficacy, PCSK9 inhibitors may be the biggest challenge yet. Health Affairs Blog. <http://healthaffairs.org/blog/2015/02/17/in-the-debate-about-cost-and-efficacy-pcsk9-inhibitors-may-be-the-biggest-challenge-yet/>. Published February 17, 2015. Accessed July 20, 2015.

<http://dx.doi.org/10.1016/j.mayocp.2015.12.014>

Lowering the High Cost of Cancer Drugs—III



To the Editor: In their commentary published in the August 2015 issue of *Mayo Clinic Proceedings*, Tefferi et al¹ correctly argue that new cancer medicines in the United States are priced above international norms, at times prohibitively so. However, their recommendation that patients import cancer medicines for “personal use,” while pointing out that “prices in Canada are about half of prices in the United States,” is so fraught with danger as to be foolish.

Canada has cheaper new cancer medicines because federal law regulates the prices of patented drugs (although generic drugs are often more expensive).^{2,3} American patients can buy drugs at lower Canadian prices by crossing the border, but it is usually easier to order from Canadian Internet pharmacies.

The trouble is, most “Canadian” Internet pharmacies are anything but. The US Food and Drug Administration (FDA) reports that 85% of medicines purchased from “Canadian” Internet pharmacies are actually foreign frauds, “falsely promoted as being of Canadian

origin”.⁴ Investigations by an Internet security company found foreign organized criminals masquerading as Canadian pharmacists and using fake pharmacy licenses.⁵

Further, even Internet pharmacies on Canadian soil that advertise medicines to Americans do so illegally. The worst are not licensed pharmacies at all but just call centers, while others are licensed pharmacies that advertise medicines from countries such as India or Turkey whose safety has never been scrutinized or approved by either Health Canada or the FDA.⁶ Touting these unapproved medicines, Health Canada writes, “is a violation of the *Food and Drugs Act* and *Food and Drug Regulations*.”⁷ As the commissioner of the FDA has warned, when the unapproved medicines arrive in the United States, that violates American law as well.⁸

The danger of unapproved medicines is obvious. A prominent licensed Canadian Internet pharmacy, CanadaDrugs.com, and its associates advertised and sold discounted versions of the expensive anticancer medication bevacizumab (Avastin) directly to American physicians. The product that arrived came from Turkey and was fake: it contained no active ingredient.⁹⁻¹¹ CanadaDrugs.com and its associates have now been indicted by the US Department of Justice for criminal activities including conspiracy to smuggle and money laundering.¹² In addition to Canadadrugs.com, several people, including physicians, have been and still are being prosecuted for the importation and sale of counterfeit Avastin in the United States, and some have gone to prison.¹²

Shamefully, Canada’s government encourages this sort of organized crime: Parliament even voted to not enforce the law against Internet pharmacies.⁶ Accordingly, in subsequent criminal investigations by the Royal Canadian Mounted Police, no one was prosecuted.⁶

However, the biggest problem of recommending that American cancer patients obtain medicine from Canada—a country having about one-tenth the population of the United States—is that it would drain Canada’s much smaller supply of drugs and assuredly cause drug shortages for Canadian cancer patients. Oncology practice suffers from drug shortages already.¹³ For Tefferi et al¹ and others to advocate that their American patients parasitize Canada’s limited drug supply not only threatens to make that worse but is also appallingly unethical because it amounts to redistributing scarce, life-saving resources to Americans at the expense of Canadian cancer patients’ lives—in violation of the rule of distributive justice in medical ethics.¹⁴ Simply put, good neighbors do not raid one another’s medicine chest. That is not only unethical advice but could also land American doctors in prison if they play a part in importing medicines illegally.

Obviously, America needs home-grown solutions to its drug access challenges. Regardless of the form that takes, advocates must remember that it is the responsibility of elected representatives in Washington, and not foreigners in Ottawa, to provide what Americans need.

Amir Attaran, D.Phil

Faculty of Law
University of Ottawa
Ottawa, Ontario, Canada

Tim Mackey, PhD

Department of Anesthesiology and Division of
Global Public Health
University of California San Diego
San Diego, CA

Reed Beall, MA

University of Ottawa
Ottawa, Ontario, Canada

Potential Competing Interests: Dr Mackey is a non-compensated member of the academic

advisory panel and also received funding for an unrelated pilot research grant from the Alliance for Safe Online Pharmacies (ASOP), a 501(c)(4) social welfare organization engaged in the issue of illicit online pharmacies. The funder had no role or input in this study.

- Tefferi A, Kantarjian H, Rajkumar SV, et al. In support of a patient-driven initiative and petition to lower the high price of cancer drugs. *Mayo Clin Proc.* 2015;90(8):996-1000.
- Menon D. Pharmaceutical cost control in Canada: does it work? *Health Aff (Millwood).* 2001; 20(3):92-103.
- Beall RF, Nickerson JW, Attaran A. Pan-Canadian overpricing of medicines: a 6-country study of cost control for generic medicines. *Open Med.* 2014;8(4). <http://www.openmedicine.ca/article/view/645/566>. Published October 2014. Accessed January 25, 2016.
- US Food and Drug Administration. FDA operation reveals many drugs promoted as "Canadian" products really originate from other countries [press release]. US Food and Drug Administration website. <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2005/ucm108534.htm>. Published December 16, 2005. Updated November 14, 2013. Accessed January 25, 2016.
- Rogues and registrars: are some domain name registrars safe havens for Internet drug rings? LegitScript website. <http://www.legitscript.com/download/Rogues-and-Registrars-Report.pdf>. Accessed January 25, 2016.
- Attaran A, Beall RF. Internet pharmacies: Canada's transnational organized crime. *Health Law Canada.* 2014;34(4):93-120.
- Reminder of obligations with respect to the advertising and sale of drugs. Health Canada website. http://www.hc-sc.gc.ca/dhp-mps/compli-conform/info-prod/drugs-drogues/reminder-rappel_adver-pub_tctm-eng.php. Published October 6, 2006. Accessed September 9, 2015.
- Henney JE. Cyberpharmacies and the role of the US Food and Drug Administration. *J Med Internet Res.* 2001;3(1):E3.
- United States of America v Canadadrugs.com Ltd*, United States District Court for the District of Montana (CR 14-27-BU-DLC).
- US. Food and Drug Administration. April 24, 2013: Paul Daniel Bottomley pleads guilty in U. S. federal court [press release]. US Food and Drug Administration website. <http://www.fda.gov/ICECI/CriminalInvestigations/ucm349880.htm>. Published April 24, 2013. Updated January 28, 2015. Accessed January 25, 2016.
- Weaver C, Whalen J. How fake cancer drugs entered U.S. *Wall Street Journal* website. <http://www.wsj.com/articles/SB10001424052702303879604577410430607090226>. Updated July 20, 2012. Accessed January 25, 2016.
- Mackey TK, Cuomo R, Guerra C, Liang BA. After counterfeit Avastin®—what have we learned and what can be done? *Nat Rev Clin Oncol.* 2015;12(5): 302-308.
- Kehl KL, Gray SW, Kim B, et al. Oncologists' experiences with drug shortages. *J Onc Pract.* 2015; 11(2):e154-e162.

- Gillon R. Medical ethics: four principles plus attention to scope. *BMJ.* 1994;309(6948):184-188.

<http://dx.doi.org/10.1016/j.mayocp.2015.12.012>

Lowering the High Cost of Cancer Drugs—IV



CrossMark

To the Editor: The astonishing cost of selected drugs to treat cancer¹ also extends to medications used in the supportive care of patients with cancer. A recent phase 3 placebo-controlled study of liquid doxepin (a tricyclic antidepressant drug) for painful stomatitis related to cancer treatment found a highly significant benefit for doxepin.² After the results of this study became available, I started to prescribe doxepin regularly for this indication. Initially, my patients had some problems with insurance denial because treatment of stomatitis with doxepin is not a US Food and Drug Administration—approved indication. One of the resident physicians in our radiation oncology training program suggested that I use the Internet site [GoodRx.com](http://www.GoodRx.com) to help my patients find the best price for this and other medications.

Using this simple Internet tool has been an education in a dysfunctional market. The difference in price that patients pay for prescriptions, depending on which pharmacy they use, is extraordinary. I regularly see discounts of 90% or more when the least expensive price is compared with the most expensive price. A recent search for a 10-day supply of the antiemetic ondansetron, for example, revealed a minimum price of \$13.90 and a maximum price of \$172 (US dollars) (ie, a 92% discount) (Figure).³ By using this site, I can often make insurance coverage a nonissue for patients. The least expensive price for a medication is often very affordable, even if it is not covered by insurance.

I cannot think of another industry in which a retailer would be able to

regularly charge an exorbitant premium for a product that is readily available from a competitor for 5% to 10% of the cost. The only possible comparison I can think of is the premium paid for luxury items (eg, jewelry, luggage, perfume, beverages), but even then, most buyers know that they are paying a premium for a name.

The high cost of medication is symptomatic of an industry in which the price of a product is never, or at least rarely, provided at the point of sale. It represents a failure of a market. I recently wanted to prescribe samarium, a radio-nuclide used in the treatment of selected patients with symptomatic osseous metastases. The patient wanted to know the cost. It took about a day to get this information. After the information was provided, it was clear that it did not include any ancillary fees. I asked if I could have the cost including ancillary fees (such as the fee for starting an intravenous line). I was at first told that it would take a while to even find the person who would know this. It was, in fact, another day before I had my answer.

I now regularly use [GoodRx.com](http://www.GoodRx.com) to help my patients find the best price for a medication. My experience indicates that physicians and other health care professionals can use readily available tools to dramatically reduce the cost of selected medications for patients.

James A. Martenson, MD

Mayo Clinic College of Medicine
Rochester, MN

- Tefferi A, Kantarjian H, Rajkumar SV, et al. In support of a patient-driven initiative and petition to lower the high price of cancer drugs. *Mayo Clin Proc.* 2015;90(8):996-1000.
- Leenstra JL, Miller RC, Qin R, et al. Doxepin rinse versus placebo in the treatment of acute oral mucositis pain in patients receiving head and neck radiotherapy with or without chemotherapy: a phase III, randomized, double-blind trial (NCCTG-N09C6 [Alliance]). *J Clin Oncol.* 2014; 32(15):1571-1577.
- GoodRx website. www.Goodrx.com. Accessed October 16, 2015.

<http://dx.doi.org/10.1016/j.mayocp.2015.12.011>