

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



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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.

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- 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>

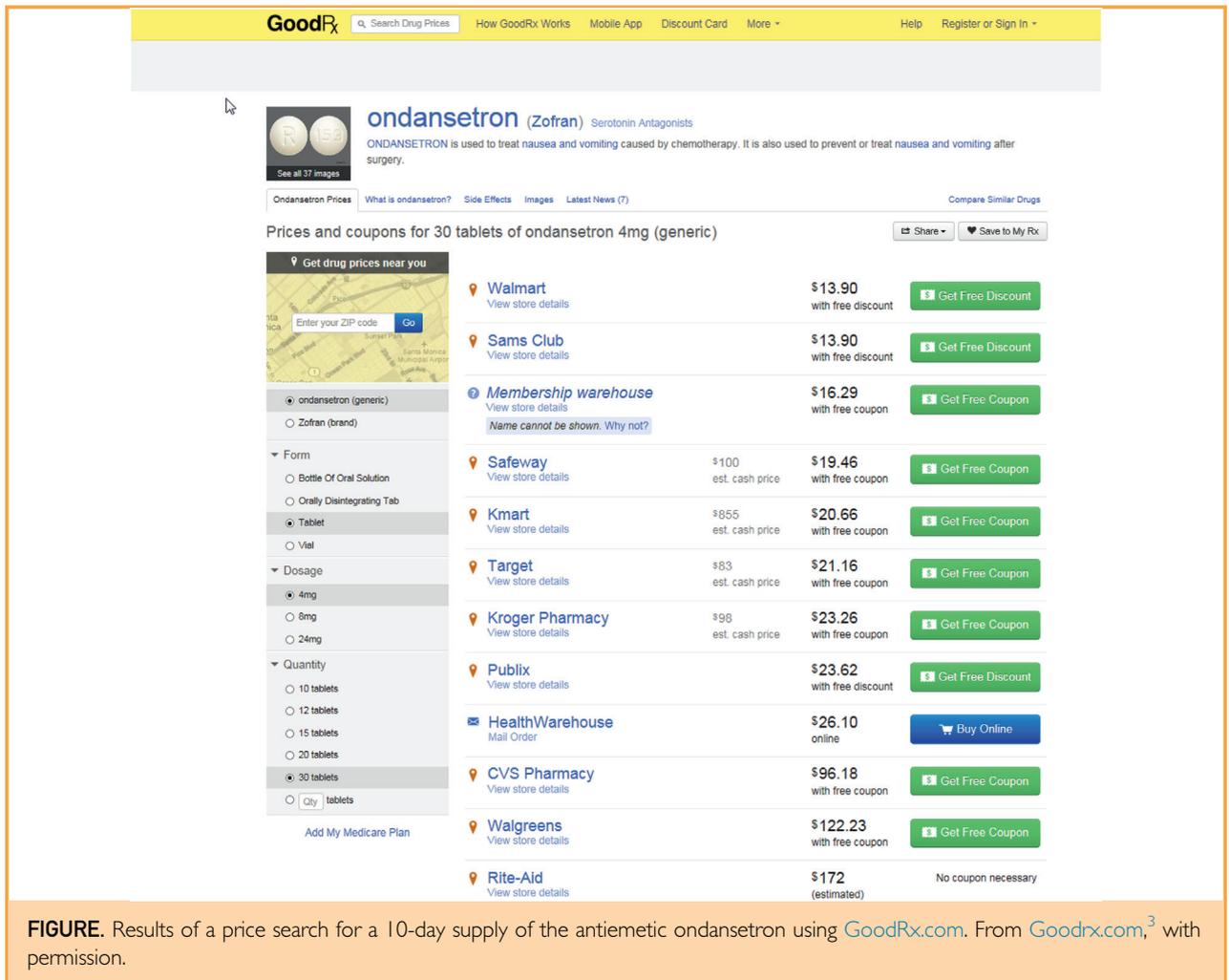


FIGURE. Results of a price search for a 10-day supply of the antiemetic ondansetron using GoodRx.com. From Goodrx.com,³ with permission.

In Reply—Lowering the High Cost of Cancer Drugs



We thank our colleagues for their perspectives on our commentary.¹ We agree with the comments of Drs Braillon and Martenson, and we thank Dr Messori and coauthors for their thoughtful analysis.

We respectfully disagree with the position of Dr Attaran and coauthors against allowing importation of cancer drugs for personal use.

Most cancer drugs have been discovered and developed through research in the United States, and

85% of basic research is funded by taxpayer money.^{2,3} Yet Americans pay 2 to 3 times more for the same drugs than those who live outside the United States.⁴ This disparity is unjust and highlights that free-market forces are not functioning well in the United States. The disparity has occurred because pharmaceutical companies have established oligopolies and have supported legislations and strategies that render them the sole decision makers on drug prices in the United States. The most important of these decisions is banning Medicare from negotiating drug prices, a provision Congress inserted into the 2003 Medicare Prescription Drug, Improvement, and Modernization Act

and the Medicare Prescription Drug Plan, Part D. Our commentary supports the patient-driven petition that proposes several approaches to allow free-market forces to function better, thereby lowering drug prices. These include (1) allowing Medicare to negotiate drug prices, (2) developing post-US Food and Drug Administration approval mechanisms to assess the value of new treatments and to propose fair drug prices, (3) encouraging professional cancer organizations to develop treatment pathways that incorporate “drug value,” (4) preventing strategies that delay availability of generic drugs, and (5) allowing drug importation for personal use.¹ Added to this list are additional