

or FDA exclusivities, it is no surprise that looming generic competition is often referred to as the “patent cliff.” Channeling his best eulogist, Shkreli once tweeted about the brand-name view of the patent cliff:

Every time a drug goes generic, I grieve. Let us not mourn the dearly departed, instead celebrate the profits and new assets it has brought us. – @MartinShkreli, April 10, 2012, 7:46 A.M.⁴¹

Hold your sympathy for drug makers, however – this humbling event of patent expiration is supposed to happen! As citizens, in fact, we actually bestow limited-time rights on drug companies in the form of patents. Society gives companies the opportunity to make billions, and with good reason. The hope is that the promise of that opportunity will incentivize companies to innovate in ways that will benefit all of us. Patents are not the type of inalienable rights to life and liberty one might think. Nor are patents the same as core rights in our homes and land.⁴² Rather, patents are time-limited government grants that exist for a specific purpose only: that is, to incentivize innovation for the benefit of society.⁴³

In the pharmaceutical space, the prevailing explanation for strong patent rights is the following: given the astronomical cost of drug research and development, patents provide a necessary period for pharmaceutical companies to recoup their costs and profit from their invention. In return, society benefits from new treatments, and we hope some of the earnings are returned to future research and development. Celebrate the profits, celebrate the assets, and then return to research!

Pharmaceuticals have long served as a prototypical example, sharing the pedestal with blockbuster movies, for the continuing benefits of intellectual property, because of their high initial fixed costs along with the multiple research failures and dead ends that occur on the way to producing one medication that receives market approval.⁴⁴ (Researchers disagree vehemently about the costs of getting a medication to market, but most research puts the expense somewhere in the high hundreds of millions or even billions of dollars.)⁴⁵ In designing those rights, society strives to strike the proper

⁴¹ Martin Shkreli (@MartinShkreli), TWITTER (Apr. 10, 2012, 7:46 AM), <https://twitter.com/MartinShkreli/status/189695905790832640>.

⁴² For an explanation of why patents are not core property rights, see Robin Feldman, *Federalism, First Amendment and Patents: The Fraud Fallacy*, 18 COLUM. SCI. & TECH. L. REV. 30, 71–72 (2015).

⁴³ U.S. CONST., art. I, § 8, cl. 8 (“The Congress shall have power ... To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”).

⁴⁴ See Mark Lemley, *IP in a World without Scarcity*, 90 N.Y.U. L. REV. 460, 464–65 (2015), www.nyulawreview.org/sites/default/files/pdf/NYULawReview-90-2-Lemley.pdf, for a fascinating discussion of this issue.

⁴⁵ See Steve Morgan *et al.*, *The Cost of Drug Development: A Systematic Review*, 100 HEALTH POLICY 4 (2011), www.ncbi.nlm.nih.gov/pubmed/21256615 (discovering estimates of drug development cost ranging from \$161 million to \$1.8 billion); see also Aaron E. Carroll, *\$2.6 Billion to*