instantly priced at the pennies on the dollar they cost to produce, we would not have any pharmaceuticals. Enter the patent system, which artificially creates opportunities for monopolies and duopolies over a certain period of time in exchange for disclosing the invention to the public.

These patent-created markets without competition set the stage for prices far above marginal cost. In other markets, such as the market for paper towels, people may look for near-substitutes instead of paying for the monopoly good. You'll live with the standard roll when the extra-absorbent, organic, double roll is four times as expensive. But some pharmaceuticals exist in a market or class of their own. Patients aren't going to give up their antidepressant for another drug when the efficacy is lower or unknown. The only true substitute is a bioequivalent generic.

Even in a monopoly market, however, price shouldn't be unbounded. The niche market for extra-absorbent, double roll, paper towels isn't a necessity when other classes of paper towel are available, and thus some price sensitivity exists. If demand falls for the special paper towels, the price should also fall, which would increase demand and allow our bespoke paper towel manufacturer to maximize its profits. Here, pharmaceutical buyers (everyone) still can't catch a break. Many drugs are necessities for the patients who use them, especially those for rare disorders. The price is quite *inelastic*, meaning that demand is not responsive to price – people will pay whatever they need to secure the good. That might explain the Daraprim price increase: the drug serves to treat rare parasitic infections, and patients are unlikely to forgo treatment.[58]

Although some drugs may have no worthy substitute, many do. Numerous antibiotics can be prescribed for basic infections; an incredible number of topical rash creams are available, not to mention painkillers. Some of these drugs have generic equivalents; some do not. Here, the lack of perfect information comes into play.

The choice of a prescription is a classic principal–agent model,[59] in which patients are the "principals" that allow doctors, the "agents," to make prescription choices on their behalf. The decoupling of who writes the prescription and who ends up paying for the medication raises an agency problem in which the doctor has little incentive to keep costs low, especially when the doctor's primary criterion behind a medication choice is efficacy. The doctor's role is to prescribe the medication believed to be the best fit, and there is little reason for the doctor to choose something that is 99 percent as effective, even if the price is dramatically lower.

[58] Pollack, *Drug Goes from $13.50 a Tablet to $750, Overnight*, *supra* note 14.

[59] The theory has long been part of economics and other fields, so it has no one particular origin, but the best-known economic paper tackling a description of the issue is: Stephen A. Ross, *The Economic Theory of Agency: The Principal's Problem*, 63 Am. Econ. Rev. 134 (1973), https://assets.aeaweb.org/assets/production/journals/aer/top20/63.2.134-139.pdf.