



## **The Tweet Heard Around the Science Lab**

October 21, 2015

By Carl Scholtz

On September 21<sup>st</sup>, Hillary Clinton tweeted that “price gouging like [Turing Pharmaceuticals] in the specialty drug market is outrageous...tomorrow I'll lay out a plan to take it on.” The tweet sent pharmaceutical and biotechnology stocks into a rapid tailspin. The following day, Hillary laid out her multi-pronged plan to address the rising cost of drugs which included key tenets such as allowing Medicare to negotiate drug prices, requiring drug companies to invest certain levels in R&D, capping out-of-pocket drug costs for consumers and encouraging generic utilization. Is this industry really so fickle that one tweet by a presidential candidate can move the entire space by almost 20%? Yes. In the seven days following, the IBB (a biotech index fund) fell almost 19% while the S&P 500 was down less than 4%. Pharmaceutical and biotech companies have generally enjoyed a very favorable U.S. backdrop for existing drugs on patent protection, pricing and demographics. To potentially remove one leg of the stool could be a big deal for the sector.

First and foremost, let's try to get a handle on some of the facts. ISI-Evercore compiled a list of more than 50,000 drugs and their respective list prices over the past five years. Of these, 36,000 drugs had list prices for both 2014 and 2015. A few interesting data points on 2015 pricing relative to 2014: 44 drugs had price increases of more than 1,000%; 841 drugs had price increases of more than 100%; and 3,069 drugs had price increases of more than 20%. Roughly one-third of the drugs had some level of price increase with the remaining seeing decreased or flat pricing. Clearly, there are some “bad actors” in the pharmaceutical arena, and this type of political backlash is to be expected. Hillary's tweet was in response to an article in The New York Times from the day before that described how Turing Pharmaceuticals bought an existing drug (Daraprim) used by AIDS and cancer patients and promptly raised the price by over 5,500%. This type of behavior is unconscionable. With little justification for the price increase and the political firestorm, the CEO announced the company would be lowering the drug price by an undisclosed amount, but he hasn't yet. As a side note, I wonder whether the Clinton team

enlisted the Times to write the story to segue perfectly into her pro-populist drug pricing message and away from the email scandal. Hmm, a topic for another time.

From a political standpoint, this is an easy sell to constituents (especially the elderly). Not many consumers will advocate that pharmaceutical prices should be higher or that the example of Turing Pharmaceuticals seems reasonable. Now that this issue has really bubbled up in the media, it was the perfect time for Hillary to jump in. Yet, this isn't really a new political stance for the Democrats. Government pricing regulation of pharmaceuticals has been pushed by Democrats on multiple occasions including "Hillary-care" and "Obamacare." Interestingly, even with full control of the House, Senate and Presidency, Democrats could not get drug price regulation to be included in Obamacare. It has been a struggle.

I would point out that there is another side to this story. Actual pharmaceutical costs are not skyrocketing across the country as the media and politicians would suggest. Sure, there are bad actors raising prices on certain drugs egregiously, but the cost of prescription drugs have been increasing at a rather modest rate. The Centers for Medicare and Medicaid (CMS) estimated that its pharmaceutical costs rose by an average of 2.7% from 2007-13. While 2014 jumped +6%, this was largely on the back of Gilead's new hepatitis C drug (the largest drug launch ever). Along these lines, Express Scripts (the largest Pharmacy Benefits Manager by volume) puts out a yearly drug trend report that showed prescription drug costs were up similar levels of 3%-5% for the past five years prior to a big jump in 2014 on the same hepatitis C drug. The optical difference from the price change statistics I laid out above is that many of the big price increases are driven by smaller, niche drugs, and generics have been pressuring pricing as well. Further, the price increases that make it into the public arena are list prices. Morgan Stanley estimates that net price increases were roughly half of the list price increases and have even decelerated over the past two years. In many cases, the net prices paid can be overstated by 30%-50% or more after the PBMs (such as Express Scripts or CVS) extract volume discounts. Frankly, there is no way of knowing actual industrywide price effects, but with total spend going up low- to mid-single digits, it isn't rising that fast. I would note that drugs are roughly 10% of overall health care spending and thus not the big driver of health expenses that everyone seems to think they are. Lastly, for those with new real science (which is not the case for all drug companies such as Turing Pharmaceuticals), we need to make sure that the economics make sense. Yes, they make a

lot of money on the successful drugs, but what about the failures? Several studies have shown that the average new drug that comes to market costs well in excess of \$1 billion when you include failures. Only about 8% of drugs make it from the discovery phase to market. Many drug companies do take real risks that need compensation.

I wanted to raise another issue that is clearly contributing to the supposed U.S. drug price “problem,” the world’s use of U.S. manufactured drugs and, in particular, Europe. European governments negotiate directly with drug manufacturers as part of their single payer systems. As a result, drug prices are much lower than in the United States and almost never increase. Some studies have shown European drug prices to be as much as 50%-60% below U.S. pricing. Even though not happy about the lower pricing, rational-acting U.S. companies realize that the sales in Europe are mostly incremental given limited costs to launch and sell in these countries anyway. The United States is effectively subsidizing the rest of the world. This is extremely frustrating. The point here is that the United States could also negotiate with the drug companies directly and effectively lower the overall cost of prescription drugs. The problem is that drug companies would certainly take on less risky projects – which is often where the true innovation really occurs. Regulation has negative consequences for innovative medicine. The question is how to get other nations to help pay for the cost of innovation.

Given these puts and takes around the issue, how are we thinking about pharmaceutical and biotech investments over the next 12 months? The most critical point here is that no matter what Hillary or Bernie Sanders says, nothing is going to happen on the political front to change industry pricing in the next two-plus years. It is highly unlikely that the Republicans lose the House in the 2016 election and without control of Congress, Hillary would never be able to pass government drug price controls or direct drug price negotiation. Republicans are still so focused on destroying Obamacare, they would fight tooth and nail on any other Democratic health care legislation. The one “real” impact this recent talk may cause is that some drug companies may be a little more gun shy about 2016 price increases. I suspect this will be a very modest impact though. If nothing has changed fundamentally, is it time to jump in and buy these beaten down names? I would say yes. However, sentiment is a powerful driver of stock prices and if Hillary and others continue to beat this populous drum over the election cycle, many of these names may be stuck in the mud. Even if nothing changes near-term, investors will justify downward price

moves by noting that if the long-term pricing ability is damaged, stock prices must come down. In particular, I would avoid early stage biotech companies that are particularly reliant on sentiment, high stock prices to issue more equity and have no earnings to fall back on. Large caps that have been beaten down are an area to look at as well as those areas such as generics that are part of the solution.

In thinking about this issue as a consumer and U.S. citizen, I'm torn. Ultimately, I believe in the capitalist system and believe that you have to incentivize pharmaceutical companies to invest in new innovation that our society needs and wants. Perhaps there is a way of managing the bad actors of the industry and the PBMs really need to be at the forefront of society's defense. I'm not sure how much can be easily done to combat U.S. subsidization of other countries, but movement on this front would be most welcome. Looking out ten years, I do see the potential for changes to the system that mitigate bad actors and stymie excessive price increases in certain medicines. As an investor though, I think you have to view this as an opportunity to buy high quality, non-cyclical companies at depressed prices. Nothing has really changed fundamentally, and now the stocks are cheaper. I would continue to put money to work in this area for the long-term, knowing that there may still be some pressure over the next 12 months on political rhetoric and more articles about certain bad actors.