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Red pill plus blue pill = the end of hepatitis C?

By ACSH Staff — September 3, 2014

Before we start, congratulations are in order. Marcia Angell, the former editor in chief of the *New England Journal of Medicine* and a lecturer at the Harvard School of Public Health, was the author of the 2004 best-selling non-fiction book, The Truth About the Drug Companies: How They Deceive Us and What to Do About It.

Although highly unusual, it is conceivable that she could have both a non-fiction and fiction bestseller on her hands from the same book!

Angell s premise has forever been that drug companies spend too much time on copycat or me-too drugs, which do little except help the bottom line for the companies developing these moneymaking, but otherwise-useless drugs.

ACSH s Dr. Josh Bloom dismantled Angell s premise in his 2012 op-ed [1] in *Medical Progress Today* by examining the fallacy of this mindset as it pertained to the evolution of increasingly-efficacious anti-HIV drugs.

And if we need more evidence of this misguided ideology, the same concept holds true for hepatitis C. And maybe even more so.

Dr. Bloom explains, As was the case with HIV/AIDS, the first drug(s) AZT and Invirase had many shortcomings. Neither is used (with rare exceptions) today. But the next 25 AIDS drugs were designed to overcome the problems that faced their original cousins. The result? AIDS is now very well managed with combinations of me too drugs. So well that the gap between the lifespan of HIV infected individuals is approaching that of non-infected people. Had the industry stopped after the first few drugs it would be a very different story today.

Hepatitis C, which has infected about 170 million people worldwide four times that of HIV was also the target of a huge campaign by the pharmaceutical industry. Yet, it still took more than 20 years for the first effective anti-HCV drugs to hit the market.

Dr. Bloom continues, Despite all this research, the first two specific anti-HCV drugs, which were approved in 2012, both were economic flops. This is because other companies were working on follow-on drugs (no, NOT me-too drugs) that would quickly push the first two drugs off a cliff

because they worked so much better.

The first of these is Gilead's Sovaldi, a drug that is so remarkably effective in stopping the virus from replicating, that unprecedented cure rates in the 90 percent range were realized, and without the terrible side effects of the previous standard of care.

And now, more follow-on drugs are arriving. One of these, Daklinza from BristolMyers-Squibb, just approved by the EU, operates by a different mechanism than Sovaldi. As was the case with HIV, a cocktail is far better than a single drug, and clinical trials of the two drugs together (Sovaldi and Deklinza) have resulted in a 100% cure rate in certain patient populations.

Dr. Bloom adds, The benefits of continued research after first drugs are approved are patently obvious, and anyone who fails to see this has no clue about the drug discovery process.

Not surprisingly, Gilead will almost certainly suffer financially from the approval of new HCV drugs. As other companies (most notable AbbieVie and Johnson & Johnson) get their own drugs approved, they may replace even very effective drugs like Sovaldi. And the competition from other companies will force Gilead to reexamine its pricing strategy. (Sovaldi now costs $1,000 per pill, or $84,000 for a complete course).

Better drugs. Lower prices. What is the downside to those who need treatment? Zero. But the upside is huge.

Meanwhile, Gilead is working on its own cocktail of Sovaldi plus their own drug, ledipasvir, and they obviously hope that their drugs will become the standard of care. This will be determined by ongoing clinical trials.

Dr. Bloom concludes,If competition between companies that are going after the same target, while also making significant progress, is me-too, then sign me up. Everyone wins.
