Felix and Laffirm.

Contention One is Innovation

Price controls would improve innovation for two reasons

First, NIH funding

Since Medicare covers much of prescription costs, <u>Baker of the CEPR</u> quantifies that decreasing prescriptions' prices will save the US government \$540 billion in the next decade.

The <u>CRFB</u> explains that healthcare is a line item in the US budget-- When money is saved in one place, it is reinvested into other healthcare programs.

McGreal of the Guardian explain that 97 senators and 9 out of 10 representatives have accepted campaign contributions from big pharma. Moreover, Reich of the American Prospect writes that pharmaceutical companies lobby more than any industry and overwhelmingly support the NIH because it functions as "corporate welfare" by doing the expensive research that forms the basis of drug development, making this the most likely reallocation of funds.

Munos of Science Transitional Medicine writes that previous threats to profits led to a doubling of the NIH's budget, and <u>Science News</u> reports that surplus healthcare funds have overwhelmingly gone to the NIH.

NIH research is critical to innovations, as <u>Quigley of Washington Monthly</u> writes it contributed to every single drug approved over the past six years, and has been responsible for two-thirds of breakthroughs.

NIH research outweighs innovation from the private sector for 3 reasons.

First, Quigley writes that because the private sector only pays for a third of R&D, the savings from price controls would "fund the replacement of all private... R&D several times over."

Second, Coxon of Oxford writes that the first stage of the drug development process, in which the NIH is present, is the biggest roadblock to the development of new drugs.

Third, <u>Angell</u> finds that the government directs funds to the research projects that could help society the most, whereas pharmaceutical companies simply fund drugs that offer the greatest profit, which

<u>Spector of Stanford</u> writes are "me-too" drugs that offer limited benefits over existing drugs but extend patent times and increase profits.

Thus, <u>Bernstein of the NYTimes</u> concludes that increasing funding for the NIH is the single best way to increase the quality of medicines.

The Second Reason is eliminating follow on bias

In the status quo, pharma companies invest in producing token "Follow on" innovations that only marginally improve upon existing drugs.

This is because the current market makes it no more profitable to produce a cure for cancer than it is to produce a drug that merely sustains life for cancer patients by an extra year.

Both drugs, by virtue of being the "best available drug on the market" could command literally any price, since doctors will always choose the best drug for their patients. In this way the market's extreme price inelasticity allows pharma companies to reap extreme profits off marginal improvements.

This is problematic, as marginal innovations are also much safer investments than investments in breakthrough drugs that 1) may never come to fruition and 2) are more likely to be rejected by the FDA due to their more novel nature which may entail unknown side effects

Light of BMJ quantifies the problem, finding that 90% of new drugs "provide few or no clinical advantages for patients."

Price controls solve this problem by incentivizing breakthrough innovations. <u>Rajkumar of the Mayo Clinic</u> writes that under a price controlled system, price caps would be based on the value of a drug, so companies would get to charge a price proportional to how much value their innovation provides over alternatives. Suddenly, developing a cure for cancer becomes infinitely more profitable than a drug that just extends life by a year.

The impact is that even if the amount of spending on R&D decreases, the share of that spending going to *meaningful projects* increases more than enough to offset that loss.

Using MS as a case study, <u>Paris of the WHO</u> quantifies that price controls lead to innovations that are 35-40% more socially useful. Ocana of Cancer Research adds that this value-based pricing system is the single best way to increase the number of life years saved for cancer patients.

Quality outweighs quantity with regard to innovation because Kessler of Stanford writes that only chemically new drugs have a strong positive impact on survival rates, and modified old drugs don't change them at all.

The impact is Saving Lives on a Monumental Scale

<u>Kessler of Stanford</u> writes that increasing in the stock of breakthrough drugs would prevent 2 million deaths every year.

And because <u>Boustany of Forbes</u> writes that the US funds half of the world's pharmaceutical R&D, these innovations save lives all over the world. As a result, <u>Gordon of UO</u> finds that medical innovations have the potential to save billions of lives over the next century.

Thus we affirm.

<u>Dranvoe</u>

We are the only side with even a risk of offense on innovation, as Dranvoe of Brookings writes that even if R&D spending increases in the status quo, the system's mismatched incentives mean that the number of true breakthrough drugs does not increase.