LETTER TO THE EDITOR

Do New Drugs Save Lives?

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To the Editor:—What Dr. Lichtenberg has published does not increase our confidence in his conclusion about the impact of “new drugs” on life expectancy. It would have been helpful if he had been willing to make his data available to researchers when he first began to publicize his findings on this topic in a Manhattan Institute study and a Washington Post op-ed. That would have better enabled researchers to examine the merits of his claims. It bears noting that Dr. Lichtenberg refused to share his data with us when he was informed that we were analyzing this study.

Since much of Dr. Lichtenberg’s discussion is orthogonal to our critique, it would be worth reiterating several key points. First, Dr. Lichtenberg did not even try to analyze the impact of “new drugs” on life expectancy. His measure of a drug’s “newness” depended on the year that the molecular entity was first approved by the FDA. Since more than 80 percent of new drug approvals involve new formulations, not new molecular entities, Dr. Lichtenberg’s study provides no information about the impact of most new drugs on life expectancy.

Second, many new drugs are combinations of different chemical entities with different years of approval. In these cases, Dr. Lichtenberg assigned a date based on the average of the years when the entities were first approved. This means that a drug that contains a new molecular entity may still carry an old date. Dr. Lichtenberg’s statement that “... new molecular entities were three times as likely, according to the FDA, to provide significant improvements compared to marketed products...” is disingenuous; acceptance of a drug for priority review is not a predetermination of superiority.

It is not obvious what this methodology can reveal about the impact of new drugs on life expectancy, but it clearly produces some very peculiar results, as we noted in our critique, and which he does not address in his response. For example, his

regressions on the impact of new drugs on productivity showed that education had no impact on productivity, contradicting a vast amount of economic literature. His new regression results indicate that smoking has no significant effect on life expectancy, another startling finding that flies in the face of extensive research (and seems to contradict Dr. Lichtenberg’s own statements regarding premature deaths due to smoking).

Dr. Lichtenberg concludes by challenging us to find an explanation for the increase in life expectancy in the years from “2000–2006, a period of increasing poverty and obesity and declining health insurance coverage.” One explanation for this increase in life expectancy is contained in the work that Dr. Lichtenberg cites and uses in his analysis: the negative business cycle effect documented by C.J. Ruhm that shows that life expectancy falls during the peak of a business cycle. This work would predict that life expectancy would be especially low in a year like 2000, when the year-round unemployment rate averaged 4.0 percent, the lowest level in more than 30 years. The labor market had not nearly recovered by 2006 when the employment-to-population ratio still was 1.3 percentage points below its 2000 level. Of course, 1.7 million additional workers employed in the health-care sector may have had some positive impact as well. Or perhaps other factors came into play.

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