

Aspirin Reduces Ventilation and Deaths in Hospitalized COVID-19 Patients



By Josh Bloom — Jun 15, 2021

Simple, inexpensive drugs to treat COVID are few and far between. But we may have a new, old pill to add to the arsenal. A new study tells us how well it works.



[Image: Drugs.coms](#)

One of the earliest (of many) bizarre symptoms of COVID-19 was blood clotting in the lungs. These clots could easily be seen when an endotracheal tube was removed from a ventilated patient. The tube was coated with a whole lot of mucus with

red streaks. Not so pleasant to look at.

Naturally, heparin, an anticoagulant, was tried. A modest positive effect on survival was seen in a [large retrospective study](#) reported in BMJ in February. But heparin is tricky to use. It is considered to be a [high-risk drug](#) because both over- and underuse can be fatal.

Aspirin, another blood thinner, is a safer and cheaper alternative in that it can be given orally or IV and does not carry the same risks as heparin or warfarin. But is it effective in treating COVID-19 patients? A [new observational study](#) concludes that it is.

Jonathan Chow, MD, University, and colleagues concluded that aspirin was useful in keeping people off ventilators and

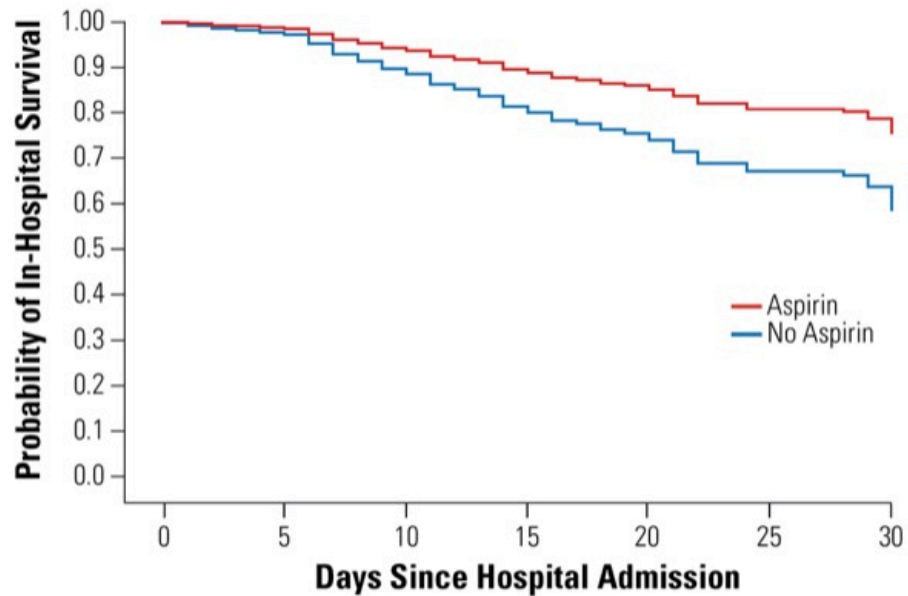
preventing COVID-19 deaths. Here is a summary of their findings.

- 412 patients were included in the study
- 314 did not receive aspirin, 98 did.
- The 98 patients who received aspirin were a combination of those who were already taking aspirin before hospitalization and those given it following hospitalization.
- After adjusting for 8 confounders, the use of aspirin was associated with a 44% decrease in ventilation, a 43% decrease in ICU admission, and a 47% decrease in deaths (in the hospital).
- There was no difference in serious bleeding between the two groups.

“The results of the study do not really surprise us because we know that COVID causes excess clot formation and we know that aspirin is a very potent blood thinner...so when you have a disease that causes clots and a medication that thins your blood, that may lead to the protective effects that we found.”

Jonathan Chow, M.D.

Below is a graph showing the difference in in-hospital groups between the treated and untreated groups over a 30-day period following admission.



**Figure. In-hospital mortality stratified by aspirin use. Aspirin use was associated with a decreased risk for in-hospital mortality (adjusted HR, 0.53; 95% CI, 0.31-0.90; $P=0.02$).
HR, hazard ratio**

So, while aspirin will not treat other serious symptoms of COVID, such as cytokine storm, it does seem to have some utility in the treatment of very ill patients. Whether it will prevent mild disease from becoming severe is, perhaps, a more interesting question but is not addressed by this study.

Tags: [aspirin](#) [COVID-19](#) [blood clots](#) [ventilators](#)

Category: [Drugs & Pharmaceuticals](#)

American Council on Science and Health Comment Policy

Comments are moderated.
Constructive feedback is welcome.
Pseudoscience, insults, or
mischaracterizations are not.

Got it

Comments for this thread are now closed



0 Comments



Rebecca Montrone ▼



Share

Best

Newest

Oldest

This discussion has been closed.

Josh Bloom

*Director of Chemical and Pharmaceutical
Science*

Dr. Josh Bloom, the Director of Chemical and Pharmaceutical Science, comes from the world of drug discovery, where he did research for more than 20 years. He holds a Ph.D. in chemistry.

Recent articles by this author:

12 Questions for RFK Jr.

DEA & FDA Screw Up, J&J Cleans Up, and the Rest of Us Get Held Up

Don't Be Afraid of mRNA Vaccines

The J-Man Chronicles: The Death of a Man With 3 Penises

NSAIDs: Pick Your Poison

[All articles by this author >>](#)

COPYRIGHT © 1978-2024 BY THE AMERICAN COUNCIL ON
SCIENCE AND HEALTH

Email: info@acsh.org

Phone: 212.362.7044

The American Council on Science and Health is a research and education organization operating under Section 501(c)(3) of the Internal Revenue Code. Contributions are fully tax-deductible. ACSH does not have an endowment. We raise our funds each year primarily from individuals and foundations.