

The Real Story of Remdesivir

Remdesivir, an experimental COVID-19 treatment, has benefited significantly from public funding. Based off publicly available data, Public Citizen estimates that taxpayers are contributing at least \$70.5 million to develop remdesivir.¹ The real number is likely higher. We trace the story below.

I. Federal scientists helped discover remdesivir's potential.

(Taxpayer support: at least \$34.5 million)

In 2015, federal scientists screened a thousand compounds from a Gilead library in search of a molecule to target Ebola virus. After identifying a remdesivir precursor, U.S. Army scientists worked with the corporation to "refine, develop and evaluate the compound." The government partnership was "critical to the successful identification of [remdesivir]." A team led by federal scientists found that remdesivir was active against coronaviruses, "suggesting the potential for wider medical use."

In addition to providing in-kind support, the Department of Defense funded Gilead directly. A 2017 government report notes that DOD "is cost sharing with Gilead Biosciences [sic] for continued development of this product." So far, DOD has given Gilead \$34.5 million. The National Institutes of Health (NIH) has also led two Ebola remdesivir trials, likely supported by millions of taxpayer dollars. This laid the groundwork for the current response.

II. The NIH funded university researchers to study remdesivir's effects against coronaviruses.

(Taxpayer support: at least \$6 million)

As part of its nearly \$700 million investment in coronavirus research, the NIH awarded University of North Carolina researchers a \$6 million grant to accelerate the development of remdesivir.⁸ NIH researchers also made significant advances. Federal scientists found that remdesivir could reduce lung damage in monkeys with an earlier coronavirus, as well as the new coronavirus.⁹

III. National governments are running COVID-19 remdesivir clinical trials.

(Taxpayer support: at least \$30 million)

Public funding is supporting many clinical trials across the world. The World Health Organization, a European consortium, and Chinese public institutions all began remdesivir trials. ¹⁰ In the U.S., the NIH is running a trial that will cost at least \$30 million this fiscal year alone. ¹¹ Taxpayers are taking significant risk. If remdesivir proves safe and effective, they should not have to pay twice.

¹ We draw on Knowledge Ecology International's Briefing Note prepared by Kathryn Ardizzone, https://www.keionline.org/RN-2020-1.

² https://www.usamriid.armv.mil/press_releases/Travis%20ID%20Week%20FINAL.pdf

³ Dustin Siegel et al., Discovery and Synthesis of GS-5734 for the Treatment of Ebola and Emerging Viruses, J Med Chem (2017).

⁴ HHS, Public Health Emergency Medical Countermeasures Enterprise Strategy and Implementation Plan (2017)

⁵ *Id*

⁶ OTA: W911QY1690001 (\$33.3 million) and W911QY1630001 (\$1.2 million).

⁷ NCT03719586 and NCT02818582

⁸ Public Citizen, Blind Spot (2020), https://www.citizen.org/article/blind-spot/. For remdesivir specifically, see https://tinyurl.com/yd2ckoaf. The NIH also awarded university researchers a \$37.5 million grant to help develop treatments for coronaviruses, including remdesivir, among other projects. https://tinyurl.com/ybyq4grb.

⁹ https://tinyurl.com/sl2q638 and https://tinyurl.com/y9oartxq

¹⁰ SOLIDARITY, INSERM (2020-000936-23), Chinese studies (NCT04252664, NCT04257656.)

¹¹ https://tinyurl.com/yakvqcja (NIH email correspondence with Wall Street Journal reporter).