LOWER DRUG PRICES NOW

PANDEMIC PROFITEERING:

How Pharma Insiders Are Using News of Government Awards and Trial Results to Boost Their Stock Prices and Profiteer Without a Vaccine.

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LowerDrugPricesNow.org

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Lower Drug Prices Now is a national coalition of nearly 60 social, racial and economic justice organizations with members in all 50 states. We are committed to transformative, systemic and bold reforms to ensure everyone has access to affordable medicines — no matter where they live, what they look like or how much money they have. Learn more about our principles for policy reform at www.lowerdrugpricesnow.org. Follow us on Twitter @peopleb4pharma.

EXECUTIVE SUMMARY

The federal government is investing billions of dollars in the development of COVID-19 vaccines and treatments, with little assurance that these medicines will be affordable or available to the millions of people who need them. Despite polling that demonstrates that the public is extremely concerned about drug corporations price gouging on COVID-19 medicines, neither the Trump administration nor Congress has taken meaningful action to limit drug corporations' monopoly control over prices, to increase transparency for corporations or to guarantee affordability for patients.

While taxpayers have not yet seen much benefit from their investments, some corporate insiders and speculators are profiting handsomely from temporary surges in stock prices that offer short-term rewards—whether or not a vaccine or medicine ultimately materializes. Rather than learning hard lessons from the opioid pandemic and other past crises, drug corporations are doubling down on reckless, short-sighted schemes for quick money rather than considering the long-term implications for investors, the reputational risks,[1] and the impacts on public health.

From January to August, the stock market value for the eight biotech companies on the S&P 500 grew by $130 billion.[2] During the same period, executives and insiders from just three of these companies — Moderna, Inovio and Vaxart — made at least $370 million in sales of company stocks inflated by news of government awards and trial results.[3,4] These findings show that company executives and insiders are profiteering from the pandemic, without any guarantee of a vaccine.

Large institutional investors are increasingly concerned about the high-risk business practices of the pharmaceutical sector that invite scrutiny, investigation, legal interventions and increased regulations. Share spikes tied to government funding of COVID-19 medicines have already attracted Securities and Exchange Commission (SEC) attention. The presence of industry insiders in positions of influence in the Trump administration raises a myriad of questions about whether investments in COVID-19 medicines serve public or private interests.

This report traces how massive public investments into the research and development of COVID-19 medicines and vaccines increase wealth for industry insiders, short-term speculators, and President Trump's political allies, while providing no guarantee of a safe, affordable treatment that serves public health needs.

- **The Trump administration's "no strings attached" taxpayer funding to drug corporations** for development of COVID-19 medicines has boosted the stock values of pharma corporations and enriched speculators, particularly in a handful of companies favored by the Trump administration.
- **News reports and the active promotion of specific medicines and corporations** from the Trump administration have further boosted stock prices, even in cases where public health experts and scientists do not support clinical conclusions or where the companies have no track record of success.
- **Speculation, insider relationships with the Trump administration, and stock buybacks** have enabled a handful of wealthy insiders to profit from public investment, while patients, consumers, and long-term institutional investors have reaped little benefit. In fact, the cycle of announcements, stock inflation, and big payouts may ultimately result in harm when the artificial boom finally crashes.

Ensuring that investors, patients, and taxpayers get a fair return on their investment—in this case, affordable and accessible vaccines and treatments that can beat COVID-19—is absolutely possible. But Congress and regulators must take action to curb corporate abuses and ensure that public money serves public health.

Stock Spikes and the Coronavirus Vaccine Bubble

The race to develop a vaccine and the massive sums invested by the federal government have triggered high-risk speculating based on short-term news flashes, with little regard for liabilities and transparency norms.[5] In some cases, just the announcement of a government grant was enough to spur a short-term share price rise absent any sound science, relevant track-record, or actual results.

A pattern has emerged in which news items drive temporary stock price surges, generating big windfalls for corporate shareholders. This pattern has been fueled by the Trump administration's allocating massive federal funding to insiders, alongside short-term speculation in company stocks based on faulty and incomplete news reports about treatment, development, and testing.

The drug corporations' stock prices have been spiking on media reports about progress toward benchmarks in development of COVID medicines which are later heavily qualified or incomplete. This allows speculators and well-connected insiders to realize short-term financial gains, regardless of actual progress on a vaccine. When stock values soar, speculators may profit in the moment, regardless of whether the vaccines they are developing ultimately succeed or fail.

For example:

- From the time that President Trump declared a state of emergency in mid-March until mid-May, the stock market value for biotech companies in the S&P 500 grew by $130 billion to over $600 billion.
- A half-dozen biotech companies outside the S&P 500 have added more than $40 billion in value since mid-March.[6]
- Biotech companies, including some with no track record, are going to the public markets as well. Biotech initial public offerings (IPO) are up 146% over last year and have accounted for almost 17% of all IPO activity this year, up from just 5.6% of last year's total.

This has prompted some investors to label the surge in stock prices *"a coronavirus investment bubble."*[7]

Short-term speculators, corporate executives, and other insiders —including those serving in the Trump administration — benefit in multiple ways ranging from direct stock sales to vesting of options and other executive pay schemes that take advantage of what may prove to be a short-term boom.

Taxpayer Investment in COVID-19 Vaccines, Treatments, and Therapeutics

It would be one thing if private speculators gambled with their own money, but when it comes to the drug corporations, the risk capital for research and innovation overwhelmingly comes from taxpayers.

Operation Warp Speed is the Trump administration's program to expedite development of a vaccine for COVID-19 and have 300 million doses ready by the end of the year.

It's a big bet given that the process to develop safe vaccines is long and comprehensive,[8] often taking a decade or more to develop, test, approve, and evaluate. The timeline may vary depending on resources, technology, and other factors. Most public health experts agree that the timeline that President Trump has promised — to have a vaccine by the end of 2020 — is incredibly ambitious.[9] Many view the timeline with skepticism and express concern it could result in less scientific rigor, skipped steps, or higher safety risks, rather than adhering to independently verified, peer-reviewed scientific standards.

Overall, the federal government has already provided over $19.8 billion for COVID-19 vaccines and therapeutics through contracts with the National Institutes of Health (NIH), BARDA (Biomedical Research and Development Authority), and other agencies, though there is little transparency about the specific agreements with the corporations.[10,11] According to the Government Accountability Office (GAO), 53% of these contracts were not competitively awarded.[12]

BARDA lists the following vaccine awards on its site:[13]

- **Sanofi & GlaxoSmithKline (GSK):** $2.34 billion in two awards for research on recombinant protein.
- **Pfizer:** $1.9 billion for large-scale manufacturing and fill-finish of 100M doses of its prototype COVID-19 mRNA vaccine (developed in collaboration with BioNTech, for distribution).
- **Novavax:** $1.6 billion for manufacture and delivery of vaccines.
- **AstraZeneca:** $1.2 billion for 1 billion doses of an experimental vaccine and manufacturing capacity.
- **Johnson & Johnson:** $456 million for a vaccine (to J&J subsidiary Janssen).
- **Moderna:** $96 million (the sum of three separate awards) for developing mRNA-based SARS-CoV-2 vaccine.
- **Merck:** $38 million (the company is working with IAVI).

Although many companies are working on vaccines, these eight have been granted funding through Operation Warp Speed as the corporations most likely to develop a vaccine.[14] Two of these corporations have never developed a vaccine before, and one, Moderna, has never brought any drug to market.

Other companies that have been reported to be working on vaccines include Altimmune, Heat Biologics, Inovio Pharmaceuticals, and Vaxart.[15] Only five companies have extensive experience in developing vaccines: Sanofi, Johnson & Johnson, GSK, Merck, and Pfizer.[16]

Corporations, including Astrazeneca and Janssen (Johnson & Johnson), are also receiving over $1 billion in taxpayer funding to develop other therapeutics and medicines that treat the symptoms of COVID-19, along with Regeneron, Emergent, Genentech, SAbBiotherapeutics, and Grifols.

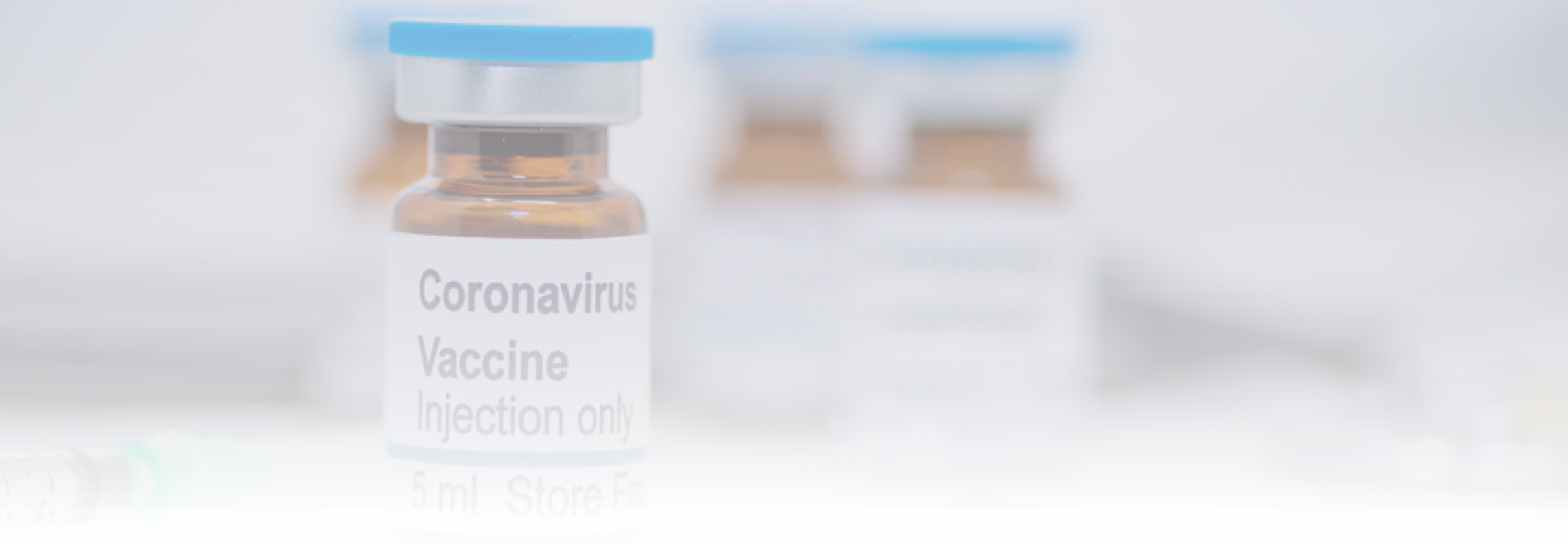
In just a few short months, vaccines have become a hot stock market commodity after getting little attention for over a decade. While vaccines may constitute only a small share of the profits[17] drug corporations rake in, the increased financialization of the industry means that big shareholders will reap significant benefits nonetheless.

A host of indexes (peer groups used by investment professionals to rate and compare the biotech sector) are all experiencing large gains this year:

- The Legal & General Health & Pharmaceutical Index, (which tracks the largest companies in the industry), hit new all-time highs in May, as did other similar indices around the world, including the FTSE 350 Pharmaceuticals & Biotech Index and the Nasdaq Biotech Index.
- A comparison of gains in the NASDAQ Biotech Index vs. the S&P 500 overall is startling: The S&P 500 has risen only 0.4% this year vs. over 20% for the biotech index.[18]
- The S&P Biotech Select Index, which tracks all biotech stocks across the major U.S. stock exchanges, is up almost 24% on the year.[19]

Big shareholder gains, however, are not always synonymous with actual progress on a vaccine. Whether stock market speculation or overvaluation actually helps get a vaccine faster or serves anyone beyond insiders and short-term speculators remains to be seen.

And while there rightfully has been tremendous attention given to the issue of what drug corporations may charge for vaccines and about how pricing will impact profits, there is less recognition of what taxpayers have already paid and how that funding supports short-term market speculation. Taxpayer funding has driven substantial wealth increases for some shareholders even before there is any product to sell.



Government Awards Drive Speculation and Stock Surges

The Trump administration itself has been a key factor in driving stock speculation, largely through announcements about the massive infusions of taxpayer funding into its select Operation Warp Speed corporations.

Operation Warp Speed has faced scrutiny because of potential conflicts of interest and ethics questions. Moncef Slaoui, the Operation Warp Speed director, was until recently a large shareholder in Moderna, a recipient of the program's funding. He continues to hold undisclosed amounts of stock in other drug corporations, including GlaxoSmithKline (another recipient of taxpayer-funded grants), and serves on the board of Medicxi, a biotech company that invests in the development of new medicines.[20]

TABLE 1: Shareholder Price Surge Following Announcement of Federal Awards*

Company	Share Price March 2, 2020	Federal Award Date & Amount	Share Price After Federal Award[21]	% increase
Moderna (MRNA)	$29.88	April 17, 2020 $483 million	$46.85	**56.8%**
Moderna (MRNA)	$29,88	July 26, 2020 Additional $472 million	$80.60	***72%***[22,23]
Novavax (NVAX)	$12.02	July, 7, 2020 $1.6 billion	$104.56	***769.9%***
Pfizer/BioNTech (PFE/BNTX)	PFE: $34.88 BNTX: $36.60	July 22, 2020 $1.6 billion[24]	PFE: $38.56 BNTX: $104.17	***PFE: 10.5%*** ***BNTX: 184.6%***
Johnson & Johnson (Janssen) (JNJ)	JNJ: $140.02	March 30, 2020 $456.2 million	$133.01	***-5.0%***
AstraZeneca (AZN)	$45.87	May 21, 2020 $1 billion	$55.28	***20.5%***
Sanofi (SNY)	$48.73[25]	February 19, 2020 $226 million	$50.71[26]	***4.0%s***
Merck (MRK)	$81.37	April 15, 2020 $38 million	$82.07	***0.86%***

*Government Awards from April 17-July 27, 2020.

Stock prices increased in all but one of the seven Operation Warp Speed corporations soon after federal contracts were announced publicly, in some cases significantly.

Like HHS's Operation Warp Speed, the Food and Drug Administration (FDA) has developed into own program to expedite vaccines through fast-track approvals called the Coronavirus Treatment Acceleration Program (CTAP). Like government funding, news of gaining the FDA fast-track designation has also boosted share prices and increased short-term returns for COVID-19 medicines.

In mid-July, Pfizer's stock rose 5% and BioNTech shot up 15% when the two companies announced that Pfizer/BioNtech received fast-track designation from the FDA for a COVID-19 vaccine in development.

Medical News Updates Drive Stock Surges

It's not just news of government funding and approvals that spurs short-term stock increases. Even partial public reports about developments or claims of clinical benchmarks reached can drive up share prices in the moment, even if the content of those announcements does not suggest progress toward a treatment or even if the announcements are viewed with some skepticism by key stakeholders such as researchers and scientists.

News reports about clinical trials, in whatever phase, have increased stock values, sometimes dramatically.

TABLE 2: Shareholder Price Surges Following News Reports

Drug Corporation	News Report	Share Price Change
Moderna (MRNA)	News that all 45 of the patients in their trial produced neutralizing antibodies against Covid-19.[27]	16.0%
Vaxart	News that the company would be added to a Federal "Challenge Study" for companies looking for a cure.[26] Per MarketWatch, Armistice Capital, the largest shareholder (who has personal relationships, see below) sold approximately $83 million in Vaxart shares in June. In the last 3 months insiders have sold 45.8 million shares of Vaxart.	456.0%
BioNTech	News announcing their initial set of clinical trials.[29] This was before any results, they were just announcing the work.	4.8%
Pfizer	News announcing their initial set of clinical trials.[30] This was before any results, they were just announcing the work.	1.3%
Pfizer	News that a trial with only 24 participants resulted in all developing antibodies.[31]	4.7%
GSK	News about a partnership to develop a vaccine with Sanofi.[32] The 3.5% translates to at least $2.15 billion in value.[33]	3.5%
Innovio	News that the company hoped to begin clinical trials in May.	70.0%
Novavax	News about the enrollment of the first participants in clinical trials. Overall the company's stock has risen 1227.9% this year.[34]	15.3%
Gilead	News that Remdesivir showed positive trial results as a treatment in Covid-19 patients.[35] That 2% translates to approximately $2 billion in value.	2.0%
Altimmune	News that the company was beginning pre-clinical testing of candidates.[36]	181.0%

Even media controversy over clinical efficacy may heighten stock prices — particularly when the Trump administration is promoting a medicine. The debate over President Trump's promotion of hydroxychloroquine, an oral medication used to prevent and treat certain forms of malaria, as a treatment for COVID-19 is an example. Hydroxychloroquine is used in the treatment of lupus, rheumatoid arthritis, and other diseases. About 5.6 million prescriptions are written in the U.S. in a typical year.

Sold under the name Plaquenil, hydroxychloroquine is available in generic form as well. Its manufacturers include Sanofi (NASDAQ: SNY, sold as Plaquinel), Teva (NYSE: TEVA), Mylan (NASDAQ: MYL), Novartis (NYSE: NVS), and Amneal (NYSE: AMRX).[37]

President Trump began extolling the virtues of hydroxychloroquine as a treatment for the coronavirus in March, calling it "one of the biggest game changers in the history of medicine,"[38] despite concerns from the scientific community and the administration's own public health experts about inconclusive evidence of hydroxychloroquine's efficacy as a treatment for COVID-19.[39]

Shareholders stood to benefit significantly from widespread use of hydroxychloroquine for COVID-19. That includes a number of Republican donors, including Ken Fischer, a large shareholder in Sanofi;[40] Joe Pizza,[41] Trump major donor and purveyor of hydroxychloroquine sulfate; and Bernard Marcus,[42] founder of the Job Creators Network. The Job Creators Network launched a social media campaign in March urging Trump to "cut the red tape" and approve hydroxychloroquine for COVID-19 patients.[43] The group is funded by PhRMA, the drug industry lobby that includes companies such as Teva and Mylan that supply hydroxychloroquine.

Mylan shares got a 6% bump when the corporation announced in March that it would restart manufacture of the medicine. Teva stock bounded 13%[44] after announcing the company would produce 6 million doses of hydroxychloroquine requested by the federal government.

After Trump began talking up hydroxychloroquine, first-time prescriptions rose by 46 times the normal daily average,[45] even though the drug had not yet been approved for use in treating COVID-19. The surge in prescriptions led to a shortage of the drug for patients taking it for FDA-approved treatment of other conditions, like lupus and arthritis. In March, disease groups[46] and the American Medical Association[47] issued statements citing concerns about promoting, prescribing, ordering, and dispensing medications to treat COVID-19 that could prompt potential shortages for patients who depend on those drugs to treat other conditions.

Although there is still no scientifically conclusive evidence[48] that hydroxychloroquine should be used to treat COVID-19 and the FDA last month actually revoked[49] emergency use authorization, the president and his economic adviser, Peter Navarro, continue to promote hydroxychloroquine as a COVID-19 drug.[50] The president's promotion has been so effective that the stock continued to surge even after the FDA withdrew approval of its use.[51]

In July, the Trump administration's announcement of a loan to Kodak to manufacture hydroxychloroquine and other medical ingredients drove the bankrupt company's stock up more than 300% in trading.[52] *Barron's* Al Root noted that *"the stock's surprising leap is a very 2020 story about government loans, medical drugs, and Covid-19."*

Case Study Moderna: It may not be how you do science, but it *IS* how you do stocks

Hyping science may be a good strategy for increasing shareholder wealth, but it's a precarious pathway to get to a vaccine. Consider Moderna, which has no proven track record of developing successful FDA-approved vaccines even though it has been a major target for Operation Warp Speed investment.

Moderna's innovative technology for a vaccine is based on prompting an immune response using messenger RNA. The science is promising, but the company has already sparred with government agencies and experts over process, monitoring, and timelines.[53]

Just months ago, virtually no one had heard of Moderna. The company's meteoric rise from unknown to front-runner in the vaccine race is nothing short of remarkable, especially considering it has never brought any drug to market, much less a vaccine.

It began in mid-April when Moderna received over $400 million for development and manufacture of a vaccine for COVID-19 using mRNA technology. The share price for the Cambridge-based company climbed by 15.4%, leading to its highest-ever price at that point — $49 a share.[54]

Since then, on the heels of more speculation, stock value has only continued to increase, spiking again in mid-July when analyst Michael Yee of Jeffries Financial Group announced that a vaccine could be worth at least $5 billion per year due to sales volume and government contracts.[55] Share prices climbed again at the announcement of another government award,[56] $483 million, to Moderna on July 26th. The company's stock is up 290% this year to date. Moderna's market value rose to more than $29 billion despite it having no products on the market.[57] Moderna further benefited by being added to the NASDAQ 100.

Moderna received heavy criticism in mid-May when it released questionable vaccine trial results.[58] The company announced that eight trial participants had developed antibodies to COVID-19. This drove a 20% jump in the company's stock price, and Moderna was credited with starting a 4% rise in the overall stock market.

The problem is that when this happened, the public didn't know if other people in the study would have the same results, that these were partial results from a small, early-stage study, and that Moderna did not publish any data to back up its assertions. A press release, issued two hours before the market opened, moved the entire stock market. Dr. Peter J. Hotez, co-director of the Texas Children's Hospital Center for Vaccine Development, commented, *"This is not how you do science. It's really impossible to make sense of their statements."*[59]

The science is spotty, but the short-term financial results are impressive: the stock gained 20% in one day after it announced positive pre-clinical trial results in June.[58] Moderna was seeking to raise $1.374 billion from their stock sale. The company priced shares at $76 — not bad, considering it started the year trading around $19.[61]

NOVAVAX

Case Study Novavax:
Is it what you know or *whom* you know?

The right connections and a potentially promising, yet unproven, technology led to the Trump administration giving Novavax $1.6 billion in taxpayer money to produce 100 million doses of a vaccine.[62] At the time, the announcement was the largest COVID-19-related award yet and notable since Novavax, like Moderna, currently has no vaccines on the market.

Novavax has been around for 33 years and never successfully developed a vaccine, although it has attempted vaccines for Ebola, SARS, and MERS. None made it past the study phase. After the last failed attempt, rumors circulated that Novavax would go out of business. Novavax sold its manufacturing facility and did a reverse stock split to raise share prices and avoid being delisted by the NASDAQ.

Novavax has strong connections to the federal government. BARDA was headed by two former Novavax executives, one of whom, Dr. Richard Bright, has since been forced out after filing a 30-page whistleblower complaint against HHS, BARDA's parent agency.

Dr. Bright, who led BARDA between 2016 and 2020, served as vice president of vaccine research at Novavax. Bright filed a whistleblower complaint raising what he deemed improper contact by Novavax when the company requested a meeting with him to lobby for funding for a COVID-19 vaccine in April 2020. When Bright refused the meeting, Novavax attempted to meet with his boss.

The other executive, Dr. Robin Robinson, ran Novavax's vaccine division until 2004, when he left for BARDA. Dr. Robinson, who assisted in developing an earlier version of the company's vaccine technology and has consulted for Novavax, said, *"I do expect the vaccine to be one of the ones in the winner's circle next year.[63]"*

So far, it has been a short-term winner for speculators. Shares of Novavax are up 2,300% this year.[64] Stock prices jumped 41% in one day when the news of the government funding was announced. The stock started the year at $4.49, and as of July 20 (pre-close), its share price was $139.90.[65]

Kate Elder, a senior vaccines policy adviser for Doctors Without Borders, commented: *"The U.S. darling of the moment is Novavax. But I see this as just a further diversification of the U.S.'s risky bets with public money and little transparency."[66]*

Drug Company Insiders Are the Real Winners

Polling shows that the American public is worried about both the safety and the affordability of a prospective COVID-19 vaccine.[67] Rushing the process[68] to advance political goals, any appearance of insider conflicts of interest, or fudging the science to get to quicker approval all undermine the public's confidence in a vaccine. Ultimately, that kind of skepticism could have negative consequences for public health by deterring support for inoculation.

But drug corporation insiders are concerned primarily with profits, not with public health. These insiders are already making huge sums off of public money and speculation on the race for a vaccine, reaping rewards now whether or not Americans get a vaccine later.

Virtually every milestone, whether the announcement of public funding or news of clinical trials triggers the cycle that inflates share prices, triggers buying and selling sprees and enriches corporate insiders.

Moderna (MRNA)

Moderna insiders, for instance, have done very well, cashing in on their investments thanks to the taxpayer funding that jump-started work on the vaccine and a few strategic press releases.

From January to August, Moderna executives and insiders have made nearly $250 million in stock sales. Recent analysis of Equilar data from the New York Times determined that Moderna insiders had sold about $248 million in shares to date since January.[69] Similar research conducted by the Washington Post showed similar volume on insider stock sales at Moderna.[70]

Between **January and early June,** big shareholders cashed out of at least $70 million in stock:

- Flagship Pioneering, the largest shareholder, is owned by Moderna co-founder Noubar Afeyan. It has sold $69.5 million worth of stock.[71]
- Since January, CEO Stephane Bancel has sold more than $21 million in stock, including $6 million in May, after Moderna received nearly half a billion dollars from the federal government and saw share prices increase by over 50%.[72]
- Since January, Chief Medical Officer Tal Zaks has cashed out $35 million.
- Since May 29, CFO Lawrence Kim has sold over $12.5 million.

A one-day announcement on July 26th prompted a flurry of buying and selling on shares with increased values, making insiders big profits.

MODERNA			
Corporation	**Announcement**	**Transaction**	**Profit**
	July 26th: Announced an additional $472 million government contract.	**July 27th:** Chief Medical Officer Tal Zaks completed 7 transactions, buying 20,000 shares at $20.93 and $19.15 and selling them all between $76.89 and $80.43.[73]	$1,574,523.76
		July 29th: CEO Stephane Bancel sold 9,000 shares at $82.00 making $738,000.[74]	$738,000
		July 30th: Bancel sold 10,000 shares at $77.98 making $779,800.[75]	$779,000
		August 3rd: President Stephen Hoge bought 20,000 shares at $0.99 apiece. The same day, he sold both at $74.89.[76]	$1,497,800
Total:			**$4.59 million**

Although there are spikes around announcements, the cycle is on-going: since Moderna was last in the media spotlight in mid-July, top executives have continued to sell stock.

- **Chief Medical Officer (CMO) Tal Zaks:** For the period June 30 to July 30, purchased $3.4 million worth of shares and sold $12.1 million worth. His net profit on those transactions was $8.7 million. He had already sold $35 million between January and June 26.[77] Zaks has made $44 million since January. The most interesting thing about Mr. Zaks' activity is that he appears to be "zeroing out" in all his recent transactions—i.e., he ends the weekly buy/sell cycle with no holdings of Moderna stock.[78] It is concerning that the CMO of a vaccine company that just received over $1 billion in taxpayer money is seemingly cashing out as fast as possible.

- **Moderna CEO Stephane Bancel:** Bancel has also been actively selling. Over the same period, he's cashed out an additional $10.4 million, bringing his yearly total to at least $31.4 million in profit.

After announcements, the subsequent jump in share prices, the corporate stock sale, and the insider transactions, former SEC officials also noticed the pattern, with one calling the sequence of events *"highly problematic,"* while another suggested that the SEC should investigate the company: *"This isn't really insider trading as much as it's market manipulation,"* and *"It looks like you're hyping the stock so you can then go and sell it."*[79]

These actions raise questions about the motivation of an industry that the public is relying on for a vaccine. While all of this activity may end up being legal, it is very high-risk and at odds with the best practices of transparency, good governance, and sound science.

It has also increased scrutiny for the Trump administration because of the close association of Moderna with Operation Warp Speed's leader, Moncef Slaoui. Slaoui took the helm of Trump's Operation Warp Speed with over $10 million in Moderna shares that then increased in value by another $2 million in just his first week on the job.[80] He later divested the stock but became the subject of an investigation over his role as a contractor.[81]

As a contractor, not an employee, Slaoui is not subject to ethics and disclosure rules about what his other interests in specific corporations may be.[82] The lack of transparency and accountability raises concerns that he may have conflicts of interest or that personal profit may guide decisions about which corporations may receive federal funding and approval for vaccines.

Operation Warp Speed's award of over $1 billion to Sanofi and GlaxoSmithKline,[83] Slaoui's former employer and a company in which he still holds substantial shares, is likely to further escalate scrutiny and conflict-of-interest concerns.

Inovio (INO)

Inovio, like Moderna, has never successfully brought a vaccine to market, but shareholders have nonetheless prospered from the vaccine bubble.

From March to July, Inovio's CEO, Chief Financial Officer and Chief Science officer made $3.4 million from stock sales.

Although Inovio is not listed on the Operation Warp Speed dashboard, Chief Executive Officer (CEO) J. Joseph Kim attended a meeting at the White House with President Trump and then made a public claim that his company had made a vaccine in 3 hours. A few press releases about funding and preliminary results, spiked stock by 220%. A few days later, Inovia insiders went on a selling spree and have repeated the pattern on subsequent announcements.

On June 23, Inovio announced that they received $71 million from the Department of Defense (DOD) for work on a vaccine. Thanks to a number of well-timed press releases about funding and preliminary results, Inovio shares soared, increasing over 900% in just a few months.[84] Then, two more announcements of positive test trials triggered more sales among corporate insiders.

INOVIO			
Corporation	**Announcement**	**Transaction**	**Profit**
	March 2nd: Meeting with President Trump. The stock price spiked 220%.[85]	**March 8th:** Kies sold 7,424 shares at $14.09.[86]	$104,646.43
		March 8th: Humeau sold 6,882 shares at $14.09.[87]	$96,967.38
		March 5th: Chief Science Officer (CSO) Laurant Humeau sold 9,857 shares at $9.80.[88]	$96,598.60
		March 5th: CFO Kies sold 9,817 shares at $9.80.[89]	$96,206.60
	June 30th: Reported positive trial results with no supporting data.[72]	**June 30th:** Chief Financial Officer (CFO) Peter Kies sold 35,000 shares at $26.50.[91]	$927,500.00
	July 30th: Reported positive results from a study in primates.[74]	**July 30th:** Chief Executive Officer (CEO) J. Joseph Kim sold 100,000 shares at $21.13.[93]	$2.1 million
Total:			**$3.42 million**

Vaxart (VXRT)

Vaxart, like Inovio, is not among the companies selected for funding through Operation Warp Speed, but that fact has not stopped Vaxart insiders from reaping big benefits by claiming association in the media. Vaxart's CEO Andrei Floroiu made a public statement associating Vaxart with Operation Warp Speed on June 26th: "We believe that Vaxart's Covid-19 vaccine is the most exciting one in O.W.S. because it is the only oral vaccine (a pill) in O.W.S."[94]

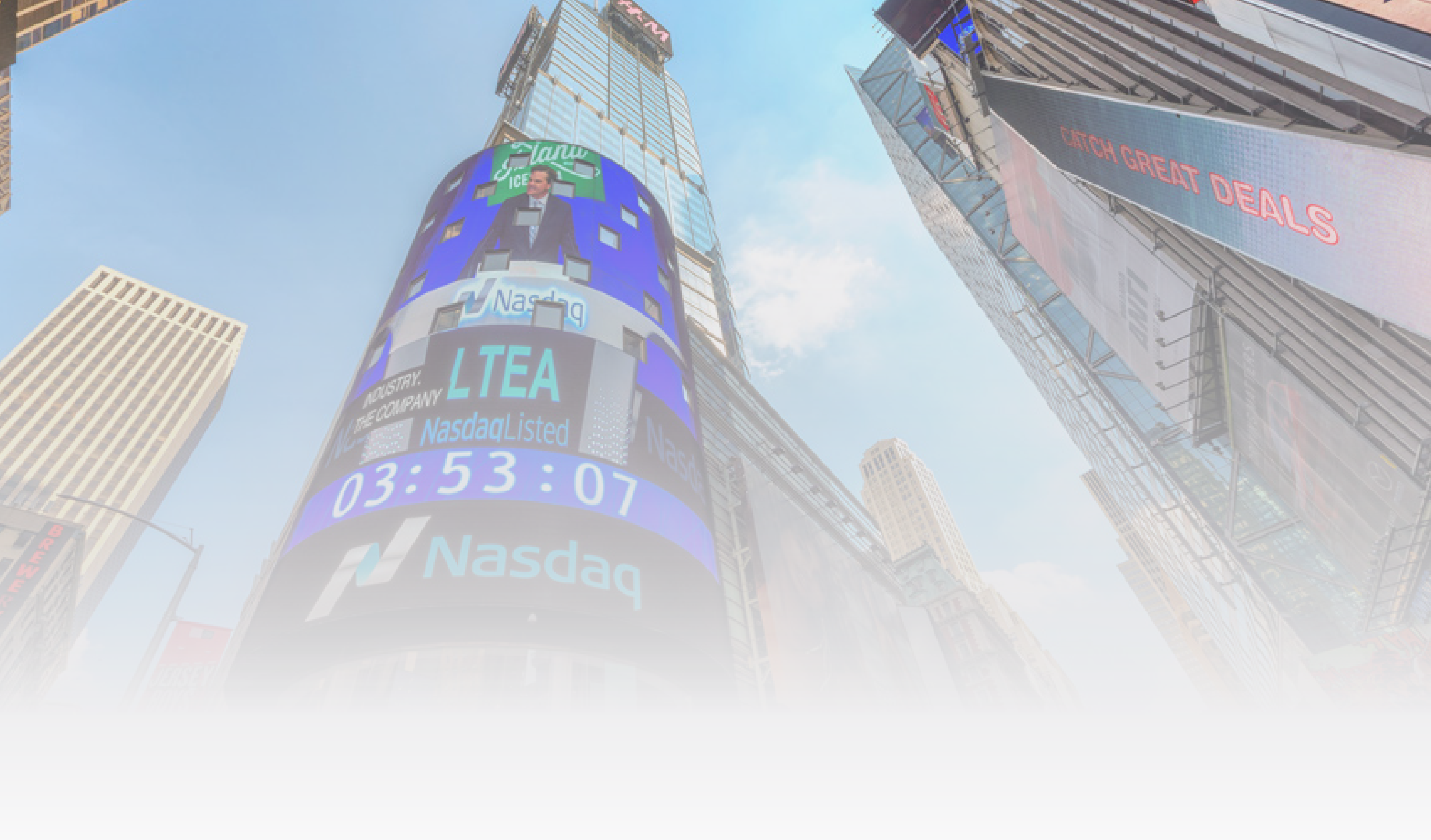
Vaxart's involvement was actually limited to participation in a study, as the Department of Health and Human Services (HHS) clarified in a subsequent statement.[95] The clarification didn't preempt the San Francisco company's stock from surging more than 456% in a week.[96]

In the meantime, **Armistice Capital,** a hedge fund that is Vaxart's largest shareholder (and holder of two seats on its Board of Directors) didn't waste any time in capitalizing on the share price bump. **In June and July, Armistice sold nearly 20 million Vaxart shares, making a pre-tax profit of $266.8 million.**

VAXART			
Corporation	**Announcement**	**Transaction**	**Profit**
	June 26th: The company announces participation in Operation Warp Speed.	**June 26th:** Armistice Capital, Vaxart's largest shareholder bought 16,666,667 shares at $0.30 per share and sold 18,226,667 shares at $10.38.[97]	$189 million
		June 29th: Armistice bought 4,090,909 shares at $1.10 and sold 9,385,386 shares at $8.29.[98]	$77.8 million
Total:			**$266.8 million**

Changes in its shareholder agreement with Vaxart made just weeks earlier enabled it to purchase quickly to capitalize their announcement. Some observers strongly suggest that these and other actions may well warrant the SEC's attention, including Armistice slowing its divestiture in Vaxart prior to the OWS announcement and Vaxart giving Armistice an easier ability to sell stock.[99]

Vaxart's executive leadership is also poised for significant personal profits. Part of CEO Floroiu's executive compensation is stock worth about $4.3 million. Those shares have increased in value more than sixfold since the company's share prices have surged. Floroiu's contract gives him flexibility to sell when he wants to maximize profits.[100]



Stock Buybacks Help Industry Insiders Make More Money

Companies buy back their own shares as a short-term tactic to increase executive pay and game their financial ratios, reducing the number of shares on the market, which temporarily inflates the value of the remaining shares. Since this practice has been legalized, it has become more and more common for corporations that are flush with cash to buy back their own stock rather than invest in the long-term health of the company through increases in research and development funding, expansions in production, and making their products more affordable. As more and more corporate executives receive stock shares as compensation, they reap ever bigger rewards, while patients see fewer new medicines and increased prices.[101]

In 2018 Pharmaceutical bought back $69.1 billion of their own stock driven largely by the 2017 Tax Cuts and Jobs Act (TCJA). Pharmaceutical companies spent almost $4 billion more on buybacks in 2018 than on research and development.[102] The new tax law just accelerated a trend that drug corporations were already embracing: between 2016 and 2019, the 12 largest American pharmaceutical companies spent $183 billion on buybacks and authorized another $47.4 billion to be spent.[103] Between 2008 and 2017, S&P 500 drug corporations distributed more profits to shareholders and spent more on stock buybacks than they spent on research and development.[104]

Even before COVID-19, the federal government was already spending over $40 billion in taxpayer dollars on medical research.[105] But COVID-19 has led to even bigger new infusions for vaccines, treatments, and therapeutics. That taxpayer funding could free up resources for corporations to put into innovation and development of other drugs, but so far, the public investment in COVID-19 medicines has mainly yielded higher share prices for industry insiders.

The ultimate insiders are drug corporation executives and CEO's whose compensation is increasingly in the form of shareholder returns that supplement huge salaries. In 2017, 28 drug executives in the top 500 averaged more than $41 million in total compensation, with 83% stock-based.[106] This means drug corporation executives, including CEOs, can increase wealth through the speculative stock inflation that follows announcements of funding or clinical benchmarks, whether or not a drug is ever brought to market.

Consider these examples:

- Pfizer CEO Dr. Albert Bourla holds a total of 443,581 shares.[107] All directors and executive officers of Pfizer hold a combined 6,564,457[108] shares. With the per-share-price gain of $3.68, Bourla made over $1.6 million personally. The officers and directors as a group made $24.1 million.[109]
- In the same time frame, AstraZeneca (AZN) shares rose by $9.41 per share. CEO Pascal Soriot made over $3.6 million personally, while all officers and directors made at least $5.3 million.[110]

Michael Sinha, a researcher at the Harvard-MIT Center for Regulatory Science at Harvard Medical School, wrote, *"These predictions have generally panned out as predicted: Stock buybacks and dividends have increased, drug prices continue to rise, and manufacturers have announced cutbacks in certain areas of important research, such as Parkinson's and Alzheimer's disease."*[111]

CONCLUSION

The COVID-19 pandemic response has created new urgency and a clear mandate for long-overdue action to ensure that taxpayer-funded research and innovation translate into affordable, accessible medicines for everyone who needs them. Overcoming COVID-19, getting the economy back on track, and saving millions of lives depend on ensuring equitable access to vaccines and treatments for people in the United States and around the world.

But using taxpayer resources and the frenetic media cycle to drive speculation that increases stock values for insiders won't result in a safer, more affordable vaccine or medicine. Instead, when the vaccine bubble bursts, long-term shareholders, patients, and taxpayers may be worse off. Despite the tremendous investment of public funding, we could remain at the mercy of COVID-19 without any prevention or effective treatment at hand. Meanwhile, a small group of industry insiders will be millions of dollars richer.

Policymakers have an opportunity to take decisive action to rein in speculation, corporate greed, and short-term, risky business schemes that put shareholder wealth ahead of the long-term interests of patients, consumers, taxpayers, and investors.

It's time to increase accountability in Congress and in boardrooms to ensure responsible and accountable results for public health investments so that everyone can get the medicines they need to stay healthy and take care of their families, no matter where they live, what they look like, or what's in their bank account.

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