Research Report

NEW ANALYSIS REVEALS \$250M IN INSIDER PROFITEERING AT GOVERNMENT-BACKED DRUG COMPANIES, INCLUDING \$105M IN NEW TRADES IN LESS THAN 3 MONTHS' TIME

In Six Months Since Launch Of Operation Warp Speed, Execs At Five Drug Companies Made Net Profit Of More Than \$250 Million Dumping Their Companies' Stocks. An earlier report from Accountable.US compiled executive trading data from the launch of Operation Warp Speed on May 15 through August 31, 2020 and found they made stock transactions valued at a net profit of more than \$145 million. New analysis of insider transactions at those companies over the six months between May 15 and November 15, 2020, show more than \$250 million in net profit.

Company	Net Profit
Emergent BioSolutions	\$23,906,515.14
Johnson & Johnson	\$4,276,630.00
Moderna	\$165,889,439.69
Novavax	\$46,372,082.90
Pfizer	\$10,490,165.85
Total	\$250,934,833.57

From September To Mid-November, Execs At Four Drug Companies Involved In Operation Warp Speed Have Made Net Profit Of More Than \$105M Dumping Their Companies' Stock. According to SEC filings, from the beginning of September through November 15, 2020, executives and directors at four of the companies receiving COVID vaccine funding through Operation Warp Speed have made stock transactions valued at a net profit of more than \$105 million. NOTE: Johnson & Johnson did not report any new individual insider transactions during this period.

Company	Net Profit
Emergent BioSolutions	\$18,860,527.37
Moderna	\$50,406,146.77
Novavax	\$29,037,668.05
Pfizer	\$7,388,569.80
Total	\$105,692,911.99

- The net profit of these transactions from May 15-November 15, 2020 was \$250.9 million; the total profit of these trades was \$292.1 million. See appendix A for additional details.
- These transactions were made by **just 26 individuals**, an **average profit of more than \$9.7 million** per individual. See appendix B for additional details.
- Moderna remained the most active trader overall, making 491 transactions valued at a net profit of \$165.9 million.
- Novavax was an active trader in recent months making 103 transactions valued at a net profit of \$29 million from September 1-November 15. In contrast, from May 15 to August 31 a period 4 weeks shorter Novavax made 53 transactions valued at a net profit of \$17.3 million.
 - Novavax made the vast majority of the recent trades in a six-day period from September 26-October 1, bringing in a net profit of \$26.2 million for four of its executives. Two days prior, on September 24, the company announced it was moving into Phase 3 trials for its COVID vaccine candidate.
- Pfizer's CEO and EVP dumped 176,000 shares in the company at a net profit of \$7.4M as stock prices surged the same day it announced positive initial trial results on its COVID vaccine candidate.
- Note that these trades do not account for these executives' other, traditional compensation sources like salary, bonuses or most stock benefits.

CASE STUDIES

ACCOUNTABLE US

Novavax Execs' 6-Day, \$26.2M Windfall Followed Announcement That Company Would Begin Phase 3 Vaccine Trial

95 Of Novavax's 103 Transactions Between Sept 1-Nov. 15 Occurred In A Six Day Period From September 26-October 1. Of the 103 transactions Novavax reported between September 1 and November 15, 2020, 95 occurred in the six-day period from September 26 to October 1.

Transactions Between September 26-October 1 Brought In \$26.2 Million In Net Profit For Four Novavax Execs. The insider transactions reported between September 26 and October 1 brought in a net profit of \$26,237,802.09 for four Novavax executives -

Executive	Position	Net Profit
Gregory Glenn	President, R&D	\$6,860,194.66
John Herrmann	EVP, Chief Legal Officer	\$6,430,087.76
John Trizzino	EVP, CBO, CFO	\$7,000,046.95
Stanley Erck	President & CEO	\$5,947,472.71
Total		\$26,237,802.09

See appendix C for additional details on Novavax trading between September 26 and October 1.

September 24: Novavax Announced It Was Entering Phase 3 Trials For Its COVID Vaccine Candidate. "The Maryland company, which has never brought a vaccine to market, has started its Phase 3 trial in the United Kingdom, with plans to begin in the United States in October. The vaccine maker Novavax said Thursday that it would begin the final stages of testing its coronavirus vaccine in the United Kingdom and that another large trial was scheduled to begin next month in the United States. It is the fifth late-stage trial from a company supported by Operation Warp Speed, the federal effort to speed a coronavirus vaccine to market, and one of 11 worldwide to reach this pivotal stage. Novavax, a Maryland company that has never brought a vaccine to market, reached a \$1.6 billion deal with the federal government in July to develop and manufacture its experimental vaccine, which has shown robust results in early clinical trials." [New York Times, 9/24/20]

Headline: New York Times: "Novavax Enters Final Stage of Coronavirus Vaccine Trials." [New York Times, 9/24/20]

Pfizer CEO Albert Bourla And Exec VP Sally Susman Cashed Out \$7.4M In Stock On Day Company Announced Positive Data On COVID Vaccine Candidate

Pfizer CEO Albert Bourla And Executive VP Sally Susman Sold More Than 176,000 Shares In Company Stock On November 9 For Net Profit Of \$7.4M:

Name	Position	Date	Amount	Acquired or Disposed	Price	Value	Source
Sally Susman	Executive VP	11/9/20	43,662	D	\$41.94	\$1,831,184.28	<u>Link</u>

Albert	Chairman &	11/9/20	132,508	D	\$41.94	\$5,557,385.52	<u>Link</u>
Bourla	CEO						

Headline: Business Insider: "Pfizer's CEO cashed out \$5.6 million of stock after trumpeting its COVID-19 vaccine. That's 30% of his total compensation last year." [Business Insider, 11/12/20]

Headline: CNBC: "Pfizer CEO sold \$5.6 million of stock as company announced vaccine data that sent shares soaring." [CNBC, 11/11/20]

Headline: Salon: "Watchdog group calls for SEC probe: Pfizer CEO dumped \$5.6M in stock on day of vaccine news." [Salon, 11/13/20]

Bourla's Trades Were Made In Compliance With An Automatic Trading Plan That He Updated The Day Before The Company Announced Phase 1 Trial Data. "The timing of the implementation of Bourla's plan, however, has raised questions about what the Pfizer CEO knew and when, and whether that may invite further scrutiny from federal regulators. On Aug. 19, Bourla implemented his stock-trading plan, according to his disclosure to the Securities and Exchange Commission. The next day, Aug. 20, Pfizer issued a press release featuring "additional Phase 1 safety and immunogenicity data" and confirming that Pfizer and its German partner, BioNTech, were "on track to seek regulatory review" for its vaccine candidate by October. The financial news channels Fox Business, CNBC and Bloomberg all covered the August news, with CNBC noting that the stock appeared to be "moving sharply higher today on an optimistic vaccine timeline."" [NPR, 11/11/20]

GOVERNMENT FUNDING

Emergent BioSolutions – \$628 Million

June 1: HHS Announced Emergent BioSolutions Would Receive \$628 Million Under Existing BARDA Contract For Vaccine Manufacturing. "As part of the Trump Administration's Operation Warp Speed, on Monday, the U.S. Department of Health and Human Services announced a task order with Emergent BioSolutions to advance manufacturing capabilities and capacity for a potential COVID-19 vaccine as well as therapeutics. The task order is worth approximately \$628 million and falls under an existing contract with the Biomedical Advanced Research and Development Authority (BARDA), part of HHS's Office of the Assistant Secretary for Preparedness and Response." [HHS press release, 6/1/20]

Headline: Washington Post: "Before pandemic, Trump's stockpile chief put focus on biodefense. An old client benefited." [Washington Post, 5/4/20]

Headline: Washington Post: "Before the pandemic, top contractor received billions from government to help prepare the nation for biowarfare." [Washington Post, 6/17/20]

Johnson & Johnson – Nearly \$1.5 Billion

Johnson & Johnson Awarded \$456 Million For Development Of COVID Vaccine Candidate. "The U.S. government is backing J&J's vaccine effort with \$456 million in funding as part of a spending spree aimed at speeding production of a vaccine to end the pandemic, which has infected millions and killed more than 660,000 people." [Reuters, 7/30/20]

August 2020: Johnson & Johnson Announced Deal Worth \$1 Billion For Vaccines From Operation Warp Speed. "Johnson & Johnson announced Wednesday that it will develop and deliver 100 million doses of its coronavirus vaccine for the U.S. in a deal totaling more than \$1 billion. The company's experimental vaccine is currently in early stage human trials and is expected to begin late-stage human trials in September, executives have previously said. The deal gives the U.S. the option to order an additional 200 million doses, according to the announcement." [CNBC, 8/5/20]

Moderna - Nearly \$2.5 Billion

Headline: "After nearly \$1B in research funding, Moderna takes \$1.5B coronavirus vaccine order from U.S." [FiercePharma, 8/12/20]

NIH Director Confirmed That Federal Government Had Intellectual Property Rights To Moderna COVID Vaccine Candidate. "The National Institutes of Health may own intellectual property that undergirds a leading coronavirus vaccine being developed by Moderna, according to documents obtained by Axios and an analysis from Public Citizen. . . . "We do have some particular stake in the intellectual property" behind Moderna's coronavirus vaccine, NIH Director Francis Collins said during an Economic Club interview in May. . . . Separately, four NIH scientists have filed for a provisional patent application entitled "2019-nCoV vaccine," according to disclosures in a pending scientific paper. Moderna scientists co-authored that paper, but none are listed as vaccine co-inventors." [Axios, 6/25/20]

Moderna Has Never Brought A Product To Market. "The bold promises of Mr. Bancel and his colleagues have long struck some in the pharmaceutical industry and on Wall Street as hubris.

No company using the same experimental approach has managed to pull off a successful drug. Moderna has more than 20 experimental drugs and vaccines for cancer, infectious diseases and other conditions in development, but none are close to being commercially available to patients." [Wall Street Journal, 7/1/20]

Novavax - More Than \$1.6 Billion

June 2020: Novavax Received \$60M In Funding For Its COVID Vaccine Candidate From Department Of Defense. "When the conversation with BARDA never materialized, the company shifted its attention to the Defense Department. With the second CEPI contract in hand, Novavax was finally able to "get more and more traction," Mr. Trizzino said. In June, the department awarded the company \$60 million. "And ultimately, Operation Warp Speed took over from there," he said." [New York Times, 7/16/20]

July 2020: Novavax Received \$1.6B In Funding For Its COVID Vaccine Candidate From Operation Warp Speed, The Largest OWS Award At The Time. "The company's effort paid off last week when Operation Warp Speed, the Trump administration's effort to hurry coronavirus vaccines to the market, gave Novavax \$1.6 billion, the largest award to date." [New York Times, 7/16/20]

Novavax Has Never Brought A Vaccine To Market, Was Trading At 36 Cents Per Share In May 2019 And Did A 1-For-20 Reverse Stock Split To Remain On The NASDAQ Exchange. "Vaccine company Novavax Inc. traded at just 36 cents a share last May. Hoping to revive its shares and remain on the Nasdaq market, the Maryland company did a 1-for-20 reverse stock split but still finished 2019 down another 39%. The three-decade-old company had failed to develop a single vaccine, cash was dwindling, and it had to fire over 100 employees, about a quarter of its workforce. The December holiday party was held in a conference room and featured pizza slices and bottles of Coke." [Wall Street Journal, 7/9/20]

New York Times: "In Pursuing Its Contracts, Novavax Drew On Influential Ties It Has Cultivated In The Federal Government." "In pursuing its contracts, Novavax drew on influential ties it has cultivated in the federal government and close-knit global health community, according to interviews with current and former company executives, federal and global health officials, vaccine experts and investment analysts. ... The Biomedical Advanced Research and Development Authority, or BARDA, which makes deals with drug manufacturers during public health emergencies and is one of the federal agencies carrying out Operation Warp Speed, has been headed by two former Novavax executives. One of them would later complain that the company crossed ethical lines when it approached him about receiving funding this spring." [New York Times, 7/16/20]

Pfizer – \$1.95 Billion

July 22: Pfizer Inked Largest Contract To Date With Operation Warp Speed At \$1.95 Billion. "Pharmaceutical giant Pfizer and German biotechnology firm BioNTech will supply the federal government with 100 million doses of their coronavirus vaccine under a \$1.95 billion deal announced Wednesday, the administration's largest investment yet in a vaccine that has not been proved effective. The government also has an option to acquire an additional 500 million doses of BNT162, as the vaccine candidate is called. It still must secure regulatory approval or authorization that Pfizer projects it may seek as early as October." [Washington Post, 7/22/20]

Appendix A: Total Purchase Price, Total Profit & Net Profit

ACCOUNTABLE TOS

The following table reflects the total purchase cost of stocks acquired, total profit of stocks disposed of and net profit (sum) from the transactions.

Moderna							
Total Purchase Cost	\$27,479,848.21						
Total Profit	\$193,369,287.90						
Net Profit	\$165,889,439.69						
Novavax							
Total Purchase Cost	\$10,923,558.70						
Total Profit	\$57,295,641.60						
Net Profit	\$46,372,082.90						
Emergent BioSolutions							
Total Purchase Cost	\$2,322,393.15						
Total Profit	\$26,228,908.29						
Net Profit	\$23,906,515.14						
Pfizer							
Total Purchase Cost	\$510,085.00						
Total Profit	\$10,991,250.85						
Net Profit	\$10,490,165.85						
Johnson & Johnson	ohnson						
Total Purchase Cost	\$0.00						
Total Profit	\$4,276,630.00						
Net Profit	\$4,276,630.00						

Appendix B: Executive Transactions

ACCOUNTABLE USA

The following table summarizes insider transactions – acquisitions and disposals of stock – between May 15 and November 15, 2020 by executives at five Operation Warp Speed-backed companies.

	Position	Net Profit					
Emergent BioSolutions							
Atul Saran	EVP, Corp Dev, GC & Secretary	\$165,428.88					
Fuad El-Hibri	Chairman	\$15,858,412.91					
George Joulwan	Director	\$744,635.40					
Jerome Hauer	Director	\$373,373.10					
Kathryn Zoon	Director	\$478,592.08					
Louis W. Sullivan	Director	\$3,002,114.46					
Ronald Richard	Director	\$1,400,049.01					
Sue Bailey	Director	\$1,064,254.78					
Zsolt Harsanyi	Director	\$819,654.52					
	Johnson & Johnson	1					
Ashley McEvoy	EVP, WW Chair, Medical Devices	\$4,276,630.00					
	Moderna						
Lorence Kim	CFO	\$36,855,027.32					
Lori Henderson	General Counsel and Secretary	\$5,299,558.02					
Stephane Bancel	CEO	\$57,059,863.01					
Stephen Hoge	President	\$19,930,224.40					
Tal Zvi Zaks	Chief Medical Officer	\$46,744,766.94					
	Novavax						
Gary Evans	Director	\$1,253,920.00					
Gregory Glenn	President, R&D	\$13,393,825.43					
James Young	Director	-\$73,245.00					
John Herrmann	EVP, Chief Legal Officer	\$10,916,800.80					
John Trizzino	EVP, CBO & CFO	\$11,186,243.00					
Michael A McManus Jr	Director	\$947,200.00					
Stanley Erck	President & CEO	\$8,747,338.67					
	Pfizer						
Albert Bourla	Chairman & CEO	\$5,557,385.52					
Mikael Dolsten	President, R&D	\$3,602,681.05					
Ronald Blaylock	Director	-\$501,085.00					
Sally Susman	Executive VP	\$1,831,184.28					
TOTAL		\$250,934,833.58					

Appendix C: Novavax Trades Between September 26-October 1

ACCOUNTABLE US

Name	Position	Date	Amount	Acquired	Price	Value	Source
				or Disposed			
				Disposeu			
John	EVP, Chief	9/26/20	14,925	D	\$113.56	# 4 004 000 00	<u>LINK</u>
Herrmann John	Legal Officer EVP, Chief	9/26/20	1,919	D	\$113.56	\$ 1,694,883.00	LINK
Herrmann	Legal Officer	9/20/20	1,919		φ113.30	\$ 217,921.64	LINK
Gregory	President,	9/26/20	18,639	D	\$113.56		<u>LINK</u>
Glenn	R&D	0/00/00	45.400	<u> </u>	* * * * * * * * * * * * * * * * * * *	\$ 2,116,644.84	
John Trizzino	EVP, CBO, CFO	9/26/20	15,408	D	\$113.56	\$ 1,749,732.48	<u>LINK</u>
John	EVP, CBO,	9/26/20	1,709	D	\$113.56	ψ 1,7 +3,7 32.40	LINK
Trizzino	CFO		,		·	\$ 194,074.04	
Stanley	President &	9/26/20	2,434	D	\$113.56		<u>LINK</u>
Erck Stanley	CEO President &	9/28/20	25,000	A	\$5.95	\$ 276,405.04	LINK
Erck	CEO	9/20/20	25,000	A	φυ.9υ	\$ (148,750.00)	LINK
Stanley	President &	9/28/20	25,000	Α	\$5.95	Ţ (* 15,155155)	LINK
Erck	CEO					\$ (148,750.00)	
Stanley Erck	President & CEO	9/28/20	1,338	D	\$111.18	\$ 148,758.84	<u>LINK</u>
Stanley	President &	9/28/20	11,429	D	\$111.18	Ф 140,730.04	LINK
Erck	CEO	0,20,20	11,120		ψ	\$ 1,270,676.22	<u>=:::::</u>
Stanley	President &	9/28/20	275.69	D	\$107.22		<u>LINK</u>
Erck Stanley	CEO President &	9/28/20	3,739.10	D	\$108.20	\$ 29,559.67	LINIZ
Erck	CEO	9/20/20	3,739.10		φ100.20	\$ 404,560.15	LINK
Stanley	President &	9/28/20	6,661.40	D	\$109.07	+ 101,000110	LINK
Erck	CEO	2/22/22				\$ 726,546.24	
Stanley Erck	President & CEO	9/28/20	8,132.83	D	\$109.98	\$ 894,448.64	<u>LINK</u>
Stanley	President &	9/28/20	2,343.11	D	\$110.97	Ψ 00+,++0.0+	LINK
Erck	CEO				·	\$ 260,014.92	
Stanley	President &	9/28/20	215.54	D	\$111.92	ф 04.400.04	<u>LINK</u>
Erck Stanley	CEO President &	9/28/20	726.82	D	\$113.02	\$ 24,123.24	LINK
Erck	CEO	9/20/20	720.02		φ113.02	\$ 82,145.20	LINK
Stanley	President &	9/28/20	401	D	\$113.81		LINK
Erck	CEO	0/00/00	1 000 51		044500	\$ 45,637.81	1.18.117
Stanley Erck	President & CEO	9/28/20	1,002.51	D	\$115.23	\$ 115,519.23	<u>LINK</u>
Stanley	President &	9/28/20	950.63	D	\$116.08	Ψ 113,313.23	LINK
Erck	CEO				·	\$ 110,349.13	
Stanley	President &	9/28/20	551.38	D	\$117.07	ф 04.550.00	<u>LINK</u>
Erck Stanley	CEO President &	9/29/20	1,000	D	\$106.22	\$ 64,550.06	LINK
Erck	CEO	3123120	1,000		ψ100.22	\$ 106,220.00	LIINIX
Stanley	President &	9/29/20	1,000	D	\$107.25		LINK
Erck	CEO	2/25/5			A	\$ 107,250.00	
Stanley Erck	President & CEO	9/29/20	1,112	D	\$108.40	\$ 120,540.80	<u>LINK</u>
Stanley	President &	9/29/20	1,000	D	\$109.25	ψ 120,040.00	LINK
Erck	CEO		,		,	\$ 109,250.00	

John	EVP, CBO,	9/28/20	25,000	Α	\$5.95		<u>LINK</u>
Trizzino	CFO	9/20/20	25,000	^	φ5.95	\$ (148,750.00)	LIIVIX
John	EVP, CBO,	9/28/20	4,600	Α	\$5.95	ψ (140,730.00)	LINK
Trizzino	CFO CFO	3/20/20	4,000		ψ5.55	\$ (27,370.00)	LIIVIX
John	EVP, CBO,	9/28/20	247	D	\$111.18	Ψ (27,070.00)	LINK
Trizzino	CFO CFO	3/20/20	271		Ψ111.10	\$ 27,461.46	LIIVIX
John	EVP, CBO,	9/28/20	2,103	D	\$111.18	Ψ 21,401.40	LINK
Trizzino	CFO	3/20/20	2,103		Ψ111.10	\$ 233,811.54	LINIX
John	EVP, CBO,	9/28/20	275.69	D	\$107.22	Ψ 200,011.04	LINK
Trizzino	CFO CFO	3/20/20	275.05		Ψ107.22	\$ 29,559.67	LIIVIX
John	EVP, CBO,	9/28/20	3,739.10	D	\$108.20	Ψ 25,555.07	LINK
Trizzino	CFO CFO	3/20/20	0,700.10		Ψ100.20	\$ 404,560.15	LIIVIX
John	EVP, CBO,	9/28/20	6,661.40	D	\$109.07	Ψ +0+,500.15	LINK
Trizzino	CFO CFO	3/20/20	0,001.40		Ψ105.07	\$ 726,546.24	LIIVIX
John	EVP, CBO,	9/28/20	8,132.83	D	\$109.98	Ψ 120,040.24	LINK
Trizzino	CFO	3/20/20	0,132.03		ψ109.90	\$ 894,439.70	LINIX
John	EVP, CBO,	9/28/20	2,343.11	D	\$110.97	Ψ 004,400.70	LINK
Trizzino	CFO CFO	3/20/20	2,040.11		Ψ110.57	\$ 260,023.82	LIIVIX
John	EVP, CBO,	9/28/20	215.54	D	\$111.92	Ψ 200,023.02	LINK
Trizzino	CFO	3/20/20	213.54		ψ111.92	\$ 24,124.01	LINIX
John	EVP, CBO,	9/28/20	726.82	D	\$113.02	Ψ 24,124.01	LINK
Trizzino	CFO	9/20/20	720.02		ψ113.02	\$ 82,148.10	LINK
John	EVP, CBO,	9/28/20	401	D	\$113.81	Ψ 02,140.10	LINK
Trizzino	CFO	3/20/20	401		ψ113.01	\$ 45,639.13	LINIX
John	EVP, CBO,	9/28/20	1,002.51	D	\$115.23	Ψ 43,033.13	LINK
Trizzino	CFO	9/20/20	1,002.51		ψ113.23	\$ 115,520.83	LINK
John	EVP, CBO,	9/28/20	950.63	D	\$116.08	Ψ 113,320.03	LINK
Trizzino	CFO	3/20/20	930.03		ψ110.00	\$ 110,346.28	LINIX
John	EVP, CBO,	9/28/20	551.38	D	\$117.07	ψ 110,540.20	LINK
Trizzino	CFO	3/20/20	331.30		ψ117.07	\$ 64,547.63	LINK
John	EVP, CBO,	9/29/20	5,485	D	\$106.04	Ψ 04,047.00	LINK
Trizzino	CFO CFO	3/23/20	3,403		Ψ100.04	\$ 581,634.34	LIIVIX
John	EVP, CBO,	9/29/20	5,653	D	\$107.05	Ψ 301,004.04	LINK
Trizzino	CFO CFO	3/23/20	3,000		Ψ107.00	\$ 605,132.73	LIIVIX
John	EVP, CBO,	9/29/20	4,751	D	\$108.08	Ψ 000,102.70	LINK
Trizzino	CFO	0,20,20	1,701		Ψ100.00	\$ 513,479.53	<u> Liivix</u>
John	EVP, CBO,	9/29/20	2,432	D	\$109.12	Ψ 010, 170.00	LINK
Trizzino	CFO	0,20,20	2, 102		Ψ100.12	\$ 265,383.49	<u> Liiviv</u>
Gregory	President,	9/28/20	25,000	Α	\$5.95	Ψ 200,000.10	LINK
Glenn	R&D	0,20,20			40.00	\$ (148,750.00)	
Gregory	President,	9/28/20	275.69	D	\$107.22	+ (************************************	LINK
Glenn	R&D	0,20,20			4.0	\$ 29,559.67	
Gregory	President,	9/28/20	3,739.10	D	\$108.20	20,000.0.	<u>LINK</u>
Glenn	R&D	3.25,25		-	Ţ:00. 2 0	\$ 404,560.15	
Gregory	President,	9/28/20	6,661.40	D	\$109.07	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u>LINK</u>
Glenn	R&D	1	-,	-	ļ	\$ 726,546.24	
Gregory	President,	9/28/20	8,132.83	D	\$109.98	, :==;0:0:=1	<u>LINK</u>
Glenn	R&D	3.25,25	-, -52.00	-	+ 100.00	\$ 894,439.70	
Gregory	President,	9/28/20	2,343.11	D	\$110.97	,	LINK
Glenn	R&D		/=	1		\$ 260,023.82	
Gregory	President,	9/28/20	215.54	D	\$111.92	,,	<u>LINK</u>
Glenn	R&D	3.25,25		-		\$ 24,124.01	
Gregory	President,	9/28/20	726.82	D	\$113.02		LINK
Glenn	R&D	3, 23, 23	1 - 5.52	-		\$ 82,148.10	
	1	1	1	1	1	, , , , , , , , , , , , , , , , , , , ,	

Crogony	President,	9/28/20	401	D	\$113.81		LINK
Gregory Glenn	R&D	9/20/20	401		\$113.01	\$ 45,639.13	LINK
Gregory Glenn	President, R&D	9/28/20	1,002.51	D	\$115.23	\$ 115,520.83	LINK
Gregory Glenn	President, R&D	9/28/20	950.63	D	\$116.08	\$ 110,346.28	<u>LINK</u>
Gregory	President,	9/28/20	551.38	D	\$117.07	,	LINK
Glenn Gregory	R&D President,	9/29/20	9,915	D	\$106.17	\$ 64,547.63	LINK
Glegory	R&D					\$ 1,052,689.43	
Gregory Glenn	President, R&D	9/29/20	5,789	D	\$107.30	\$ 621,140.02	<u>LINK</u>
Gregory Glenn	President, R&D	9/29/20	3,145	D	\$108.39		LINK
Gregory	President,	9/29/20	1,100	D	\$109.21	\$ 340,888.75	LINK
Glenn	R&D			_		\$ 120,126.05	
John Herrmann	EVP, Chief Legal Officer	9/28/20	24,750	A	\$5.95	\$ (147,262.50)	<u>LINK</u>
John Herrmann	EVP, Chief Legal Officer	9/28/20	272.93	D	\$107.22	\$ 29,263.75	LINK
John	EVP, Chief	9/28/20	3,701.71	D	\$108.20	,	LINK
Herrmann John	Legal Officer EVP, Chief	9/28/20	6,594.79	D	\$109.07	\$ 400,514.66	LINK
Herrmann	Legal Officer		·			\$ 719,281.22	
John	EVP, Chief	9/28/20	8,051.50	D	\$109.98	\$ 885,495.11	<u>LINK</u>
Herrmann John	Legal Officer EVP, Chief	9/28/20	2,319.68	D	\$110.97	\$ 885,495.11	LINK
Herrmann	Legal Officer					\$ 257,423.70	
John	EVP, Chief	9/28/20	213.38	D	\$111.92	¢ 22.002.26	<u>LINK</u>
Herrmann John	Legal Officer EVP, Chief	9/28/20	719.55	D	\$113.02	\$ 23,882.26	LINK
Herrmann	Legal Officer	0,20,20				\$ 81,326.42	
John Herrmann	EVP, Chief Legal Officer	9/28/20	396.99	D	\$113.81	\$ 45,182.74	<u>LINK</u>
John Herrmann	EVP, Chief Legal Officer	9/28/20	992.48	D	\$115.23	\$ 114,365.06	<u>LINK</u>
John	EVP, Chief	9/28/20	941.12	D	\$116.08	Ψ 114,000.00	LINK
Herrmann		0/00/00			A	\$ 109,242.39	
John Herrmann	EVP, Chief Legal Officer	9/28/20	545.86	D	\$117.07	\$ 63,901.43	LINK
John	EVP, Chief	9/29/20	5,975	D	\$106.18	Ψ 00,00170	LINK
Herrmann	Legal Officer			<u> </u>		\$ 634,436.85	
John Herrmann	EVP, Chief Legal Officer	9/29/20	7,061	D	\$107.30	\$ 757,643.18	LINK
John	EVP, Chief	9/29/20	3,419	D	\$108.39	Ψ 707,040.10	LINK
Herrmann	Legal Officer			<u> </u>	A	\$ 370,586.44	
John Herrmann	EVP, Chief Legal Officer	9/29/20	1,574	D	\$109.28	\$ 172,000.42	<u>LINK</u>
Stanley Erck	President & CEO	9/30/20	517	D	\$107.56	\$ 55,608.99	LINK
Stanley	President &	9/30/20	5,138	D	\$108.56		LINK
Erck Stanley	CEO President &	9/30/20	1,500	D	\$109.54	\$ 557,796.69	LINK
Erck	CEO	5,55,20	1,500		ψ100.0 1	\$ 164,304.00	<u> </u>

Stanley Erck	President & CEO	9/30/20	1,676	D	\$110.54	\$	185,269.73	<u>LINK</u>
Stanley	President &	9/30/20	900	D	\$111.41	Ψ	100,209.73	LINK
Erck	CEO	3/30/20	300	٦٥	Ψ111.41	\$	100,270.98	LIMIX
Stanley	President &	9/30/20	800	D	\$112.65	Ψ	100,270.00	LINK
Erck	CEO	0,00,20			ψ <u>2</u> σσ	\$	90,118.00	
Stanley	President &	9/30/20	700	D	\$114.20	Ť		LINK
Erck	CEO					\$	79,940.00	
Stanley	President &	9/30/20	800	D	\$114.73			LINK
Erck	CEO					\$	91,784.00	
Stanley	President &	9/30/20	100	D	\$115.43			<u>LINK</u>
Erck	CEO					\$	11,543.00	
Stanley	President &	9/30/20	100	D	\$115.65			<u>LINK</u>
Erck	CEO					\$	11,565.00	
Stanley	President &	10/1/20	2	D	\$108.57			<u>LINK</u>
Erck	CEO					\$	217.13	
John	EVP, CBO,	9/30/20	79	D	\$107.60			<u>LINK</u>
Trizzino	CFO				1	\$	8,500.56	
John	EVP, CBO,	9/30/20	945	D	\$108.57			<u>LINK</u>
Trizzino	CFO				1	\$	102,600.54	
John	EVP, CBO,	9/30/20	353	D	\$109.59	_		<u>LINK</u>
Trizzino	CFO					\$	38,686.33	
John	EVP, CBO,	9/30/20	332	D	\$110.85	_		<u>LINK</u>
Trizzino	CFO					\$	36,802.10	
John	EVP, CBO,	9/30/20	160	D	\$112.03	_		<u>LINK</u>
Trizzino	CFO				1	\$	17,924.85	
John	EVP, CBO,	9/30/20	58	D	\$112.78	_		<u>LINK</u>
Trizzino	CFO					\$	6,541.24	
John	EVP, CBO,	9/30/20	214	D	\$114.03	_	0.4.400.40	<u>LINK</u>
Trizzino	CFO	0/00/05	100		0.4505	\$	24,402.12	1.15.11.6
John .	EVP, CBO,	9/30/20	109	D	\$115.08	_	10 511 61	<u>LINK</u>
Trizzino	CFO					\$	12,544.04	