

Inovio Pharmaceuticals (INO) – Bad Blood The COVID-19 Version of Theranos – Target Price \$1



It was less than 10 years ago when Theranos was the talk of the med tech community as the mysterious startup claimed breakthrough advancements with the ability to quickly process over 240 laboratory tests with a prick of the finger. Seemed too good to be true? Well, as you know, the rest of the story is business history.

Fast forward 10 years and we are now facing the largest global pandemic in generations. As the greatest scientific minds globally are working tirelessly to find a cure, Inovio Pharmaceuticals (INO) claims to have developed a vaccine in just 3 hours under the same scientific team that has spent decades deceiving investors. It's been over 40 years since Inovio was founded, yet the company has NEVER brought a product to market, and all the while insiders have enriched themselves with hefty salaries and large stock sales.

In this report, Citron will detail why Inovio shareholders have been "Theranosed" and why the SEC should immediately halt this blatant stock promotion.

The Secret Algorithm

Much like Theranos, Inovio claims to have a "secret sauce" that, miraculously, no pharma giant has been able to figure out. This is the same "secret sauce" that supposedly developed a vaccine for COVID-19 in just 3 hours.

Simply put, the management team at Inovio is a group of charlatans. Just look at this exchange with 60 minutes and Inovio's SVP of R&D Researcher Kate Broderick:

Kate Broderick: All we need is that genetic code. So it's just a series of A's, and T's, and C's, and G's that make up the blueprint to the virus. We use a computer algorithm to generate the design of the vaccine. So we plugged in the viral sequence. And after three hours, we had a fully designed vaccine on paper. And then, after that, the stages to manufacture went straight into effect.



Bill Whitaker: Three hours?

Kate Broderick: Yeah, absolutely.

Bill Whitaker: Is that unusually fast?

Kate Broderick: Certainly, if you're thinking of traditional vaccines. They take months to years.

https://www.cbsnews.com/news/scientists-rush-to-develop-novel-coronavirus-vaccine-60-minutes-2020-03-22/

So Inovio has a "computer algorithm" that no one else in the world has and is arguably one of the greatest breakthroughs in vaccine discovery in the past 100 years, and yet this "computer algorithm" is not mentioned once in any of its 10-K's or 10-Q's? Sounds like Theranos to us.

BTW... we couldn't resist publishing this side by side of Inovio's Kate Broderick and Theranos' Elizabeth Holmes.





How the Stock Promotion Works

Inovio is one of the longest running and most blatant stock promotion schemes ever witnessed by Citron. The company has a well-documented history of issuing press releases saying they will have the first and best vaccine for whatever infectious disease is in the news headlines during that time. These press releases are followed by highly dilutive stock offerings and large insider sales.

Do these lines sound familiar?

"We're fortunate enough to have a technology and DNA-based therapies where we can safely and perhaps more efficiently and effectively advance these products." – Inovio CEO Joseph Kim

https://www.cnbc.com/2016/06/21/we-can-rapidly-move-zika-and-other-vaccine-studies-forward-inovio-ceo.html



"Inovio is the first organization in the world to report on positive Zika vaccine data from a clinical study." – Inovio CEO Joseph Kim

http://ir.inovio.com/news-and-media/news/press-release-details/2017/Inovios-Positive-Zika-Vaccine-Clinical-Study-Data--Published-in-New-England-Journal-of-Medicine/default.aspx

Inovio's pandemic PR playbook led CNBC's Melissa Lee to state the following to Inovio CEO Joseph Kim:

"You seem to be Johnny-on-the-spot when it comes to infectious diseases. Whenever something pops up it seems Inovio comes back into the news"

https://www.cnbc.com/video/2016/06/21/leading-the-fight-against-zika.html

This 2009 article shows that the Inovio stock promotion playbook hasn't changed over the past decade. Below are some key excerpts:

- "The pattern is so familiar it's almost a tradition. A public health scare develops. A tiny
 drug development firm issues a press release saying it may have a cure. Its stock price
 explodes. Speculative traders know the pattern and try to exploit it. Retail investors
 often get caught up in it."
- "As with many publicly traded drug-development firms, whenever Inovio publicizes positive study results, it enjoys a share-price spike, and then sees little if anything of commercial substance arise out of those studies. Over the course of its 10 years as a public company, Inovio also has also exhibited a certain fundraising rhythm -- a habit of issuing fresh shares either to the public or in private placements -- that often appears synced to its study-result bulletins and stock-price upticks."
- "Rodman & Renshaw, a small boutique investment bank that also serves as Inovio's underwriter."
- "Nothing if not confident, Kim said Inovio will, by next summer, have obtained results from human clinical studies of SynCon used for the treatment of avian flu, followed "within a few months" by tests on human patients suffering from H1N1. Kim said Inovio has already filed an Investigational New Drug application with the FDA for the avian flu version of the vaccine."
- "Wyeth (WYE), an agreement that Inovio once claimed could yield up to \$60 million in payments based on clinical study milestones. (A week after it made this deal public, Inovio announced the sale of \$5.4 million worth of stock in, curiously, a subsidiary based in Singapore.) Needless to say, those milestones were not reached and Wyeth pulled out of the contract in July this year."

https://www.thestreet.com/investing/stocks/inovio-digs-for-truffles-with-swine-flu-drug-part-1-10567479

This month, Inovio entered Phase 1 clinical trials for its COVID-19 vaccine. To be clear, Phase 1 clinical trials are simply done to determine if a drug/treatment is safe. Given the company's stock promotion playbook that we've seen with Swine Flu, Avian Flu, Zika, HIV, Ebola, and MERS, we believe it is a foregone conclusion that Inovio will announce "positive" phase 1 data. However, this doesn't change anything.



Below is a quick history of Inovio's stock promotion around "positive" phase 1 data related to prior pandemics:

Swine Flu

Inovio Biomedical H1N1 Influenza DNA Vaccines Demonstrate 100% Responses Against Swine Flu in Vaccinated Pigs

July 13, 2009

http://ir.inovio.com/news-and-media/news/press-release-details/2009/Inovio-Biomedical-H1N1-Influenza-DNA-Vaccines-Demonstrate-100-Responses-Against-Swine-Flu-in-Vaccinated-Pigs/default.aspx

Avian Flu

Inovio Pharmaceuticals' Synthetic Avian Flu Vaccine Demonstrates Inhibition of Multiple H5N1 Strains in Phase I Trial

November 17, 2011

http://ir.inovio.com/news-and-media/news/press-release-details/2011/Inovio-Pharmaceuticals-Synthetic-Avian-Flu-Vaccine-Demonstrates-Inhibition-of-Multiple-H5N1-Strains-in-Phase-I-Trial/default.aspx

Zika

Inovio's Positive Zika Vaccine Clinical Study Data Published in New England Journal of Medicine

October 05, 2017

http://ir.inovio.com/news-and-media/news/press-release-details/2017/Inovios-Positive-Zika-Vaccine-Clinical-Study-Data--Published-in-New-England-Journal-of-Medicine/default.aspx

HIV



Inovio HIV Vaccine PENNVAX®-GP Delivered Intradermally Generated Robust, Long-Term Best-In-Class Antibody and T Cell Immune Responses

October 25, 2018

http://ir.inovio.com/news-and-media/news/press-release-details/2018/Inovio-HIV-Vaccine-PENNVAX-GP-Delivered-IntradermallyGenerated-Robust-Long-Term-Best-In-Class-Antibodyand-T-Cell-Immune-Responses/default.aspx

Ebola

Inovio's Ebola Vaccine Delivered Intradermally Demonstrates 100% Immunogenicity in a Clinical Study Published in The Journal of Infectious Diseases

March 21, 2019

http://ir.inovio.com/news-and-media/news/press-release-details/2019/Inovios-Ebola-Vaccine-Delivered-Intradermally-Demonstrates-100-Immunogenicity-in-a-Clinical-Study-Published-in-The-Journal-of-Infectious-Diseases/default.aspx

MERS

Inovio's Positive First-in-Human MERS Vaccine Results Published in The Lancet Infectious Diseases

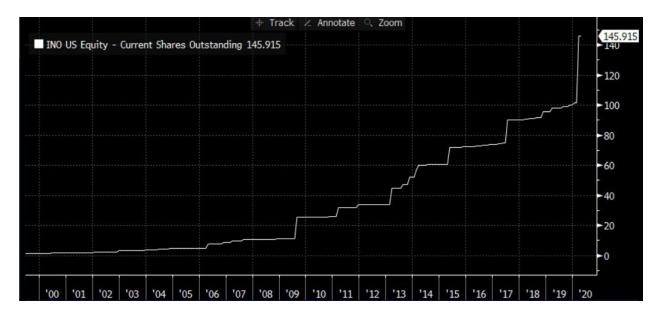
July 25, 2019

http://ir.inovio.com/news-and-media/news/press-release-details/2019/Inovios-Positive-First-in-Human-MERS-Vaccine-Results-Published-in-The-Lancet-Infectious-Diseases/default.aspx

Unlike Theranos, Inovio is a public company and while it has become the darling of finger traders in quarantine, the company has used the opportunity to flood the market with stock. We learned in Inovio's latest 10-K filed on March 12 that YTD through March 11 Inovio had sold \$208 million of stock at an average price of \$4.83 or about 70% lower than the current stock price! (And this is in addition to the issuance of approximately \$100 million in convertible promissory notes with a conversion price of \$5.38).

Since then, Inovio filed a new registration statement for a \$400 mixed shelf offering of which \$150 million in common stock is now being offered in an ATM offering!





Even Gates Can Get "Theranosed"

Unsophisticated investors might be enthused by Inovio receiving periodic small grants from the Gates Foundation. Citron has the utmost respect for the Bill & Melinda Gates Foundation. They are doing God's work. But, by no means is a \$5 million grant an endorsement of technology.

The analysts behind Inovio's stock are from lower tiered firms like HC Wainwright and Maxim Group, which traffic mainly in micro-cap stocks.

This is unlike Theranos whose investor list read like a who's-who of global industry leaders including names such as Murdoch, Slim, and Draper. Fortune even referred to Theranos' board as the "most illustrious board in US corporate history".

https://fortune.com/2014/06/12/theranos-board-directors/

BTW... Dr. William Foege was both a senior fellow at the Bill & Melinda Gates Foundation and an advisory medical board member at Theranos. Foege was the longest-tenured Theranos official after Holmes and was an outspoken defender of the company against critics. Things like this happen.

https://thehill.com/blogs/congress-blog/healthcare/288134-theranos-looking-ahead

In contrast to Inovio.... look at Moderna which just received a \$483 million grant from BARDA. While we are not endorsing the Moderna technology or stock, a \$483 million grant does get your eyes open.

https://www.barrons.com/articles/moderna-stock-grant-develop-covid-19-vaccine-51587137274



BARDA is the HHS office responsible for procurement and development of countermeasures against pandemics. They've partnered with numerous companies to fight COVID-19. Inovio is notably absent from their list of partners.

https://www.phe.gov/about/barda/Pages/default.aspx https://www.medicalcountermeasures.gov/app/barda/coronavirus/COVID19.aspx

Why have high profile drug companies reduced their involvement with Inovio?

In response to Citron's tweet warning investors about Inovio last month, the company issued the following statement:

Dear shareholders,

A third-party report today demonstrated a lack of understanding of the science behind DNA medicines. Inovio designed a vaccine construct for its coronavirus vaccine (INO-4800) within three hours after the viral sequence was publicly available; produced the vaccine at small scale and was in preclinical trials in January – preclinical results are available online in Nature Communications. Inovio expects to move into human trials next month.

Based on extensive prior work creating DNA vaccines using our proprietary DNA medicines platform, we are confident that we have a viable approach to address the COVID-19 outbreak.

We remain committed to sharing our progress as we advance into the clinic in the coming weeks.

If Citron doesn't "understand" Inovio's DNA medicines then neither does AstraZeneca or Roche who have materially pulled back from Inovio partnerships in recent years.

Investors may have been excited over Inovio recently announcing that clinical trials for COVID-19 are underway at UPenn. For those who remember, Larry Kricka of UPenn was also on the board of Theranos. Theranos even had a partnership with the Cleveland Clinic.

None of this changes that Inovio has been and continues to be a serial stock promotion.

Inovio CEO Joseph Kim is the same person who was pumping his stock at micro-cap conferences. In 2013, Kim was at the LD Micro conference pumping the company's "breakthrough technology" and "a large pharmaceutical license deal with Roche".



https://www.youtube.com/watch?v=aU4I3AL8CyE

When Roche terminated its joint agreement for the development of INO-5150 in 2014, Inovio's CEO stated:

"The Inovio/Roche partnership will continue to thrive focusing on the development of INO-180."

https://www.sec.gov/Archives/edgar/data/1055726/000119312514415209/d822715dex991.htm

Less than 2 years later, Roche completely pulled the plug on the agreement that was supposed to "continue to thrive" according to Inovio's highly promotional CEO.

https://www.evaluate.com/vantage/articles/news/inovio-gets-final-farewell-roche

The most notable of the Inovio partnerships that had Jim Cramer more excited than an Eagles playoff game was with AstraZeneca. In 2017, Inovio's CEO called this partnership "gangbusters". Less than 2 years later, AstraZeneca pulled away from the research collaboration.

https://www.youtube.com/watch?v=6AxIK3_5L6k https://www.sec.gov/Archives/edgar/data/1055726/000119312519158298/d752204d8k.htm

Fool me once, shame on you. Fool me twice, shame on me. Fool me three times.... run!

Why the SEC Should Halt Inovio's Stock Immediately

This is a dangerous stock promotion that is playing on people's greed and fears. The SEC should HALT this stock or launch an immediate investigation.

On March 3, 2020, Inovio put out a press release with an accelerated timeline for COVID-19 telling investors that they expect to have 1 million vaccines by the end of 2020... despite its FDA filing showing the test won't even be done until 2021 under best case scenario.

http://ir.inovio.com/news-and-media/news/press-release-details/2020/Inovio-Accelerates-Timeline-for-COVID-19-DNA-Vaccine-INO-4800/default.aspx

Not a single one of the many promised vaccines has EVER come to market in over 40 years! This is the same platform and same scientific team that has been fleecing investors for decades with promotional press releases and highly dilutive stock offerings.

To be clear, a vaccine is not coming anytime soon and especially not from Inovio. According to the World Health Organization (WHO), there are 76 vaccine candidates under



development for COVID-19. Assuming no problems surface, it takes at least 18 months to prove whether a vaccine is safe and effective!

https://www.sciencemag.org/news/2020/04/united-states-should-allow-volunteers-be-infected-coronavirus-test-vaccines-lawmakers

Do You Even Know What You Own???

Most investors don't know what Inovio is actually promoting as its "vaccine solution" to COVID-19. As crazy as this sounds, if you read the filings on www.ClinicalTrials.gov you will see that Inovio wants to vaccinate using its CELLECTRA 2000 electric stun gun.

https://clinicaltrials.gov/ct2/show/NCT04336410?term=inovio&draw=2&rank=1

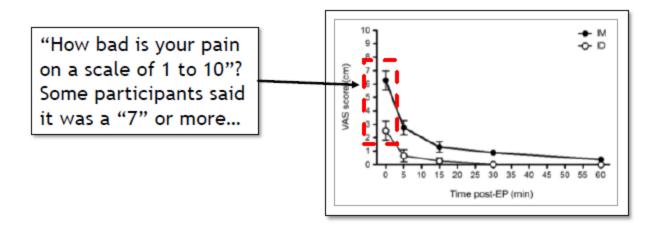
Here is a real picture of the device:



<u>Inovio's own data</u> reveals that the pain from this device is excruciating, because the device is ELECTROCUTING you with 2 sets of electrocution 3 seconds apart, each of which involves two pulses. To make matters worse, you have to get electrocuted more than once (i.e., Day 0 and Week 4).

While we struggle to convince parents to vaccinate kids against measles with a vaccine that has been safely administered OVER A BILLION TIMES, do you really think parents are going to sign up their kids to get electrocuted? This assumes the vaccine works which is based on ZERO EVIDENCE... totally ridiculous.





Conclusion

For the sake of intellectual honesty, it must be noted that the Inovio management team has not put consumers at risk of physical harm the way Theranos did with false tests.

However, at every opportunity, Inovio is guilty of issuing highly misleading information to pump the company's stock price in response to the latest outbreak. In the case of COVID-19, they are taking advantage of retail investors while they're stuck in quarantine. This whole story is just so beyond stupid and with the recent increase in outstanding shares it has become a multi-billion-dollar stock promotion that will end at \$1.

Cautious Investing to All

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