# BuyersStrike!

## It Was Dark Over Westphalia

# Quick Take – The Unbearable INsignificance of Leronlimab – CYDY

(Did you miss the **Cytondyn** lawsuit update detailing **Scott Kelly's** shenanigans and the trouble with the NASDAQ listing? Check that out here (https://buyersstrike.wordpress.com/2020/07/22/update-whos-suing-cytodyn-now-and-what-has-dr-scott-kelly-been-doing-about-it-cydy/).)

For a brief press release that was almost entirely free of data, yesterday's nonsense (https://buyersstrike.wordpress.com/2020/07/21/quick-take-what-sort-of-deceptive-nonsense-is-cytodyn-spewing-now-cydy/) from everyone's favorite reverse-merger pink sheet Coronacrapper, **Cytodyn (CYDY)**, has created quite a lot of misleading spin, sheer fabrications, and highly wishful thinking in the scores of message board posts (Hi there, InvestorsHub (https://investorshub.advfn.com/boards/read_msg.aspx?message_id=157061712). Guten Tag meine Lieblinge an Wallstreet-Online.de (https://www.wallstreet-online.de/diskussion/1301376-14981-14990/cytodyn-cydy-blockbuster-potential-wkn-a0yha5)) and accompanying paid promotional stock pumping videos (https://www.youtube.com/watch?time_continue=1&v=13I7ri0yRZs) and puff pieces (https://insiderfinancial.com/cytodyns-otcmkts-cydy-strong-safety-data-in-mild-to-moderate-smokes-gilead-nasdaq-gild-crushes-endpoint-leading-to-the-first-potential-covid-19-approval/180185/).

Most of the delusions center around two key misunderstandings.

The first is the rate of occurrence of **Serious Adverse Events (SAEs)**. Management, the stock pimps, and deluded message board posters all want retail to believe (or are trying to fool themselves into believing) that a reduction in AEs/SAEs compared to placebo is a good thing, that it somehow predicts efficacy.

They believe this so much they even twisted the numbers in their press release headline to emphasize this point. This was reiterated in the paid promotional video **The NaDDir*** appeared in yesterday afternoon to try and rally the retail troops. And it was among the key claims made in ridiculous pump pieces like the one (https://insiderfinancial.com/cytodyns-otcmkts-cydy-strong-safety-data-in-mild-to-moderate-smokes-gilead-nasdaq-gild-crushes-endpoint-leading-to-the-first-potential-covid-19-approval/180185/) from schlock stock promoting website and email provider **Insider Financial**.

The **Insider Financial** piece even made up this handy chart:

**REMDESIVIR VS LERONLIMAB**

| Mild to Moderate COVID-19 | Remdesivir | | | Leronlimab | |
|---|---|---|---|---|---|
| | 5 Day RDV | 10 Day RDV | SOC | Placebo | 700 mg |
| | n=191 | n=193 | n=200 | n=28 | n=56 |
| Any Adverse Event (AE) | 97 (51%) | 106 (55%) | 90 (45%) | 14 (50%) | 19 (34%) |

Well the **Cytodummies** are on the right track, just going in the **WRONG** direction. The longer the patients were on **remdesivir** the greater the number of AEs. This is a sign that **remdesivir** actually does something. The more powerful a drug, the more likely side effects are going to occur. This is the first rule of toxicology. As said by Paraclesus, "**Sola dosis facit venenum**" (Wait, you don't know who **Paraclesus** was? You don't know that "the dose makes the poison"? Perhaps highly speculative biotech investing really isn't for you).

With so little information in the press release, not even a list of what AEs and SAEs actually were reported, it is hard to draw any conclusions about the difference between the placebo and the **leronlimab** groups. Which brings us to the second misunderstanding.

**Dr. Scott Kelly** (who is having his own very bad week, catch up on that here (https://wordpress.com/post/buyersstrike.wordpress.com/3361)) makes outlandish and misleading claims about the information released yesterday. In the Cytodyn press release (https://www.cytodyn.com/newsroom/press-releases/detail/452/impressive-results-from-cytodyns-phase-2-covid-19-trial) he says:

> *We believe the significant reduction in SAEs in the leronlimab group ultimately translates into improved patient clinical outcomes.*

Besides the fact that no evidence of improved outcomes was provided, Scott is misusing the term of art, "significant." In statistics, and clinical trials in particular, the term "significant" has a very specific meaning. Significance in these settings means "statistical significance", which (basically) is the likelihood that the trial results were not just random chance. This is usually expressed as a p-value. To achieve significance the p-value must be less than or equal to 0.05, the standard for medical research.

Nowhere in the press release will you find a **p-value.** You won't find it in **The NaDDir's*** paid promotional video. In fact the company claims they needed more time to do the very complicated statistical analysis. Odd then, that you will find this utterly outlandish claim in the **Insider Financial** puff piece:

Leronlimab's safety data shows a statistically significant reduction in SAEs of 32% between the active and placebo arms. In most clinical trials a reduction of 30% or more represents an approvable endpoint. Drilling down

Leronlimab's safety data shows a **statistically significant** reduction in SAEs? Really? If so then why didn't the company mention that in the press release?

Simple answer? It is an obfuscation. For such a simple study the p-value for the reported results are easily calculated at home on Excel, or on any of a number of on-line calculators. Contrary to the claims of **Cytodyn**, such a basic statistical analysis takes less than one minute.

With 5 patients out of 56 in the treatment group experiencing SAEs compared to 6 out of 28 patients in the placebo group experiencing SAEs, a quick two-tailed test yields a p-value of 0.106, which is **NOT significant**.

Sample 1 Proportion (or total number)
5

Sample 1 Size ($N_1$)
56

Sample 2 Proportion (or total number)
6

Sample 2 Size ($N_2$)
28

Significance Level:

○ 0.01
◉ 0.05
○ 0.10

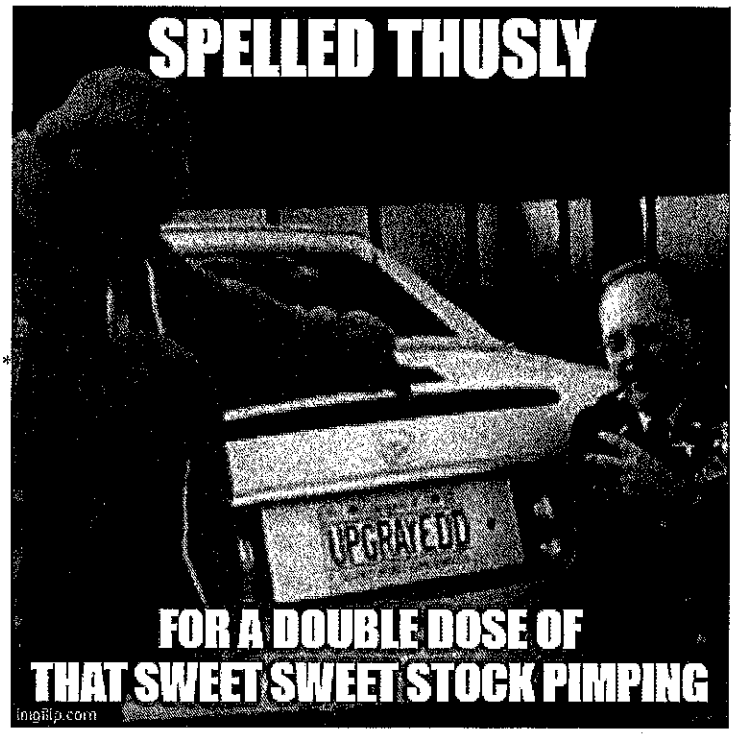
One-tailed or two-tailed hypothesis?:

○ One-tailed
◉ Two-tailed

The value of $z$ is -1.6009. The value of $p$ is .1096. The result is *not* significant at $p < .05$.

There is no statistically significant difference between the number of patients that experience SAEs on placebo or on leronlimab. Of course, that makes sense because **leronlimab** in this indication appears to be no more than a placebo. As **The NaDDir*** said in his video (https://youtu.be/13I7ri0yRZs?t=222) at the one minute mark **leronlimab** is "as good as water"!

*






Posted in Bad Directors, Bio-Dreck, Bucket Shops, CoronaCrap, Fail, Morons, Reverse Mergers on July 22, 2020 by BuyersStrike!. 5 Comments

## 5 comments

1. **John q shareholder** says:
   July 22, 2020 at 3:40 pm
   Wow! Two hit pieces in one day that you didn't even have the balls to sign your name too!

   REPLY
2. **cliff** says:
   July 22, 2020 at 4:05 pm
   "None of the SAEs in the leronlimab arm were deemed related to study drug administration by the investigators."
   https://finance.yahoo.com/news/impressive-results-cytodyn-phase-2-100010374.html

   [Cliff, that points yet again to the conclusion that leronlimab doesn't do much of anything – **Editor**]

   REPLY
   1. **cliff** says:
      July 22, 2020 at 4:39 pm
      Zero SAEs from Leronlimab prove it is very safe to use. Maybe it is a "hint of its efficacy" too pending full report from this just concluded randomized, double-blind, placebo-controlled Phase 2 study. We know it is safe. If the rest of the report show efficacy, then we might have the silver bullet for this virus. A lot of people needs help now.

      REPLY
   2. Bluefish says:
      July 24, 2020 at 5:43 pm
      Surprised you had enough light in your Mom's basement to type a reply. Show me one person anywhere that cares what you think. Bash away. I'll retire on the money I've made from Cytodyn stock so far!

      REPLY
3. **Brian Palmer** says:
   July 24, 2020 at 3:42 pm
   Dumbest article ever.
   .1 P value means there is a 90% chance this did not happen by chance. If you short this, it is the equivalent of betting on 4 in craps and if they roll it you get $5 if you don't you lose $100. Seems like a very smart play.

[Actually not the dumbest comment ever by someone inexperienced. In the interest of education, you get a super-rare, snark-free, reply. You are (basically) correct that a p-value of ~0.1 can be interpreted to mean that the results were 90% likely not to have been due to random chance. The problem is that the accepted standard in medical research is for p-values to be <= 0.05. Anything p-value above that and the results are thrown out as being failures. 90% simply isn't good enough. As for the craps bettor, payoff on 4 should be 9-5, what makes 4 a terrible bet is the massive house edge. Who do you think is the house in the stock market? The buyers of stocks, or the sellers? -- **Editor**]

REPLY