# Aytu BioPharma: Time For An Intervention

## Introduction

My motivation for this article is a strong belief in how important “free, fair, and efficient markets” are to ensure a properly functioning economic system. The ability for an investor to perform effective “Price Discovery” on a publicly traded stock, along with safeguards to protect consumers from bad actors is paramount. To be fair, I provided AYTU with all my “assumptions” articulated in this article, but they have yet to respond to my written questions.

Rather than dredge up and repeat the long, dysfunctional history, this article deals primarily with events and activities leading up to and after the AYTU acquisition of Neos Therapeutics in March 2021. It was an event that many investors (myself included) believed marked a turning point for AYTU towards operating as a bona fide public company focused on generating value for and acting in the best interests of all its shareholders. Viewed discretely, the issues raised in this article may seem minor but considered holistically, they support a theory of complicity in the questionable practices by AYTU ownership.

AYTU, with certain rights to the now U.S., patented Cedars-Sinai Internal UV Light Therapy technology ("Healight"), EU & U.S. Fast Track / Orphan Drug status for AR101 (with few alternatives to treat vEDS), a CEO-forecasted greater than $90M annual revenue run rate from the Prescription Drug and Consumer Health portfolios, and almost cash flow positive (per adjusted EBITDA), the current AYTU share price (“**SP**”) of roughly $0.28 (as at August 16, 2022) is grossly undervalued. The Company is an extreme example of Benjamin Graham’s “net nets”, with a net current asset value of $168.8M (according to the FYQ3 Balance Sheet) but trading at a market cap (“**MC**”) of around $11.5M. If you sold off all of AYTU’s component parts, you would theoretically receive almost 15x more than what the company is currently trading for. These massive under-valuations don’t persist for as long as they have with AYTU unless there is some form of corruption involved.

| AYTU BioPharma | FY 2020 | FY 2021 | Q1/22 | Q2/22 | Q3/22 |
|---|---|---|---|---|---|
| **Consolidated Statement of Operations** | (to June 30'20) | (to June 30'21) | (to Sept.30'21) | (to Dec.31'21) | (to Mar.31'21) |
| Product Revenue | | | | | |
| Consumer Health Portfolio | 10,400,000 | 32,954,000 | 8,014,000 | 8,482,000 | 10,337,000 |
| Rx / Pediatric Portfolio | 12,600,000 | 24,428,000 | 13,458,000 | 14,451,000 | 13,590,000 |
| Primary Care (ZolpiMist, Tussinex XR) and Devices | - | 8,250,000 | 425,000 | 192,000 | 272,000 |
| ***Total product revenue*** | **27,632,080** | **65,632,000** | **21,897,000** | **23,125,000** | **24,199,000** |
| **Cost of sales** | **7,553,031** | **36,432,000** | **9,441,000** | **10,826,000** | **11,513,000** |
| Operating expenses | | | | | |
| Research and development | 1,721,419 | 5,623,000 | 2,096,000 | 4,920,000 | 3,726,000 |
| Advertising and direct marketing | | 20,568,000 | | 4,985,000 | |
| Other selling and marketing | | 9,740,000 | 9,297,000 | 4,675,000 | 9,743,000 |
| Selling, general and administrative | 34,802,432 | 25,500,000 | 8,216,000 | 7,953,000 | 7,615,000 |
| Impairment of intangible assets | 195,278 | 12,825,000 | 19,453,000 | | 45,196,000 |
| Acquisition-Related Costs | | 2,919,000 | | | |
| Restructuring Costs | | 4,886,000 | | | |
| Amortization of intangible assets | 4,490,466 | 6,009,000 | 1,093,000 | 1,060,000 | 1,061,000 |
| ***Total operating expenses*** | **48,762,626** | **88,070,000** | **40,155,000** | **23,593,000** | **67,341,000** |
| Gain / Loss from operations | (21,130,546) | (58,870,000) | (27,698,000) | (11,294,000) | (54,655,000) |
| Other (expense), net | (2,606,487) | (2,050,000) | (40,000) | 20,000 | (55,000) |
| (Loss) / Gain from change in FV of Cont. Consider. | 10,430,252 | 4,459,000 | (219,000) | (277,000) | 1,257,000 |
| (Loss) on extinguishment of debt | (315,728) | (1,569,000) | | | 169,000 |
| Gain from warrant derivative liability | 1,830 | | | | 211,000 |
| Total other (expense) income | 7,509,867 | 840,000 | (259,000) | (257,000) | 1,582,000 |
| Income Tax Expense | | 259,000 | (109) | (3) | |
| Net Gain / (Loss) | (13,620,679) | (58,289,000) | (27,958,000) | (11,551,000) | (53,073,000) |
| Weighted avg. # of common shares outstanding | 45,192,010 | 16,746,679 | 25,597,319 | 26,412,473 | 29,689,856 |
| Basic & Diluted Net Gain / (Loss) per common share | ($0.30) | ($3.48) | ($1.09) | ($0.44) | ($1.79) |

| EPS ($) Diluted | | | |
|---|---|---|---|
| Full Year - Jun | 2021A | 2022E | 2023E |
| 1Q | (0.35) | (1.09)A | -- |
| 2Q | (0.82) | (0.44)A | -- |
| 3Q | (1.41) | (0.41) | -- |
| 4Q | (0.81) | (0.31) | -- |
| FY | (3.48) | (2.10) | (0.73) |

| Revenue ($M) | | | |
|---|---|---|---|
| Full Year - Jun | 2021A | 2022E | 2023E |
| 1Q | 13.5 | 21.9A | -- |
| 2Q | 13.8 | 23.1A | -- |
| 3Q | 13.5 | 24.2 | -- |
| 4Q | 23.5 | 26.6 | -- |
| FY | 65.6 | 95.8 | 106.4 |

| REV ($M) | | | |
|---|---|---|---|
| FYE Jun | 2020A | 2021A | 2022E |
| 1Q | $1.4 | $13.5 | $22.7E |
| 2Q | $3.2 | $15.1 | $26.9E |
| 3Q | $8.2 | $13.5 | $29.0E |
| 4Q | $14.9 | $23.5 | $28.2E |
| *Prev* | - | *$24.9* | - |
| Year | $27.6 | $65.6 | $106.8E |
| *Prev* | - | *$87.0* | *$126.7E* |

| EPS | | | |
|---|---|---|---|
| FYE Jun | 2020A | 2021A | 2022E |
| 1Q | $(3.22) | $(0.35) | $(0.48)E |
| 2Q | $(0.12) | $(0.72) | $(0.48)E |
| 3Q | $(1.51) | $(1.41) | $(0.35)E |
| 4Q | $(0.28) | $(0.81) | $(0.39)E |
| *Prev* | - | *$(0.66)* | - |
| Year | $(3.01) | $(3.48) | $(1.70)E |
| *Prev* | - | *$(3.14)* | *$(0.88)E* |

*AYTU FY22-Q3 ER*

In the FY22-Q3 ER, AYTU reported a massive loss of ($1.79) due to a huge impairment they took on legacy assets. Eliminate the massive Goodwill write-off and adjust the corresponding Loss / Gain in FV from Contingency Consideration (highlighted above), AYTU actually turned in an EPS of around ($0.30) in that FY22-Q3 ER, beating analyst estimates (see tables to the right). AYTU used the manipulated MC decline to reduce Goodwill from previous M&A and record additional tax loss provisions, likely clearing the books and path for additional M&A. With a low quarterly cash burn, if management were upholding their Fiduciary duty, they would use $3-5M of cash on hand to acquire the artificially depressed shares in the market, knowing they still have >$10M in the unutilized LoC for emergencies. Shares could have been offered ATM after trials got well underway and the path to profitability improved. This never happened.

## The Daily Trading Manipulation

A simple analysis of the daily AYTU trading data combined with other related information raises suspicions of orchestrated historical and ongoing SP manipulation, potentially supported by key AYTU stakeholders. One theory, supported by the data included in this article, posits that the brutal SP decline and senseless MC is to facilitate a strategy of “asset collection” by AYTU ownership i.e., manipulating publicly traded stocks for M&A, like how Neos Therapeutics’ acquisition by AYTU was set up by institutional stakeholders over several years.


*Aytu - Neos SP Performance Comparison*

The artificially-depressed SP that AYTU has been driven down to is less than cash-on-hand levels despite the $90M annual revenue run rate and includes zero expected future value of the pipeline. This SP manipulation is following a pattern similar to that suffered by NEOS leading up to the AYTU acquisition, which was handled by the same institutional stakeholders. The NEOS SP was manipulated down over a few months in 2018 from $11, to $5, then to around $2 and under. The SP was suppressed despite revenue growth and improving bottom line, allowing Neos to be bought at a bargain price. One theory suggests the AYTU SP is being deliberately manipulated so the company or the assets can be acquired at a substantial discount, or grossly undervalued in an equity basedmerger.

AYTU leadership must be either directly or indirectly complicit in the SP manipulation by not providing full and reasonable disclosure on their SP performance and ALL their assets, impairing the ability to confirm an accurate valuation and helping artificially suppress the MC. The concerns are supported by the material referenced throughout this article. I raised these issues very recently with AYTU Investor Relations (AYTU CFO Mark Oki currently handles these inquiries) with limited success:

“We continue to monitor our stock price and, unfortunately, we are trending with the XBI index. We continue to focus on our operational goals as we believe this is what will drive long-term value. We fully cooperate with all governmental/regulatory inquiries into the trading of our stock, but we do not have the ability to interfere with such trading.”

*Aytu-XBI Index Comparison*

I'm not sure what chart tools Mr. Oki is using to monitor AYTU's SP performance but mine tell a different story. Mr. Oki confirmed a timing in August for an interview but canceled at the last minute and has not yet provided a re-schedule. AYTU CEO Josh Disbrow, who is compensated quite handsomely for his "stewardship", also refuses to address these issues in public forums. This is a clear example of AYTU leadership complicit in promoting a false narrative.

Taken alone each individual question or issue presented in this article may not be grounds for an investigation but taken together, they suggest a pattern of corrupt behavior by key AYTU stakeholders. The actions and non-actions described herein have resulted in significant losses and value erosion for AYTU investors, many of whom were motivated by an opportunity to support the breakthrough Cedars-Sinai MAST Program medical technology, branded "Healight" by AYTU who acquired the rights in 2020.

## AYTU's Capital Management

The AYTU 10-Q of May 16, 2022, stated: "Management plans to mitigate the conditions that raise substantial doubt about its ability to continue as a going concern are primarily focused on raising additional capital through public or private equity or debt offerings or monetizing assets in order to meet its obligations. Management believes that the Company has access to capital resources, however, the Company cannot provide any assurance that it will be able to raise additional capital, monetize assets or obtain new financing on commercially acceptable terms."

That AYTU 10-Q also stated: "As the Company does not have sufficient cash and cash equivalents as of March 31, 2022, to cover its cash needs for the twelve months following the

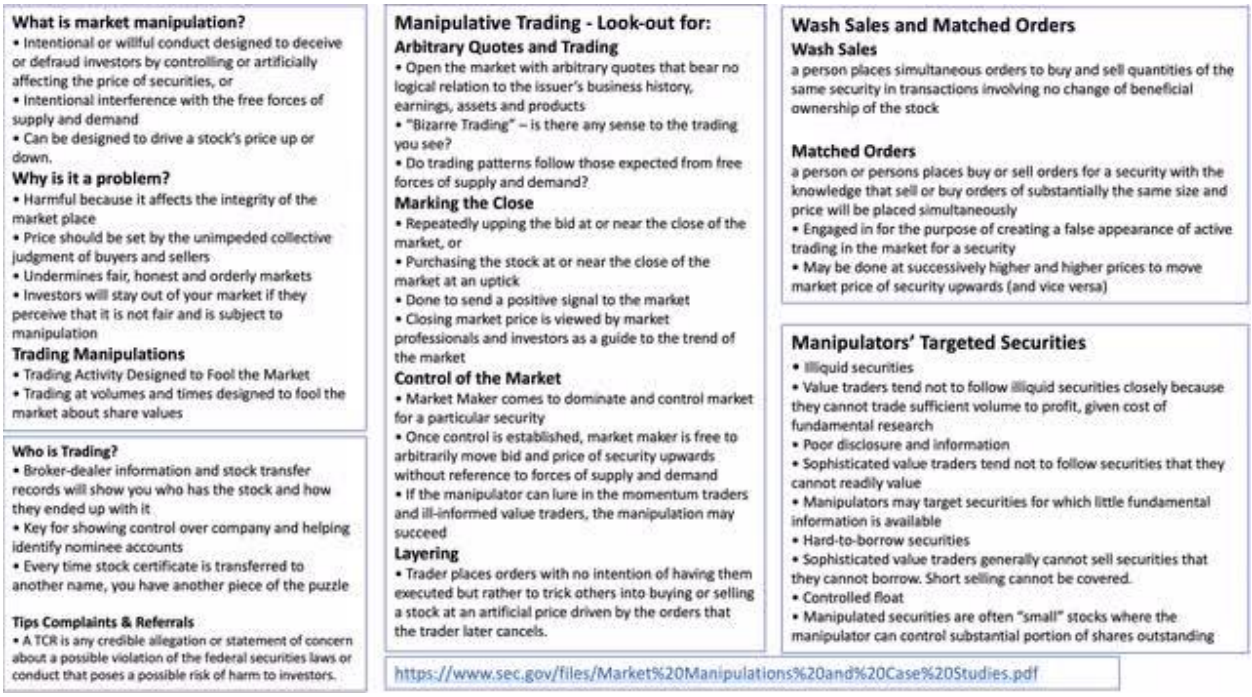
filing date of this Quarterly Report on Form 10-Q, there exists substantial doubt about the Company's ability to continue as a going concern."

The use of the word "substantial" is new in terms of being employed to characterize a "Risk" to AYTU's future operations. Yet this "Substantial Risk" is not identified anywhere in the August 7, 2022 version of the Corporate Presentation, and CEO Disbrow never publicly referenced this in any of the most recent investor conferences: Lytham Partners in June nor the Canaccord Genuity conference in August 2022.

Meanwhile, in the recent 10-Q filed in August 2022 by Avalo Therapeutics (majority owned by Armistice Capital with Steven Boyd as the former Chairman of the Board), that company, which has a long and deep relationship with AYTU, cites the AYTU "Substantial Risk" explicitly in regard to payments owed them: "As most recently public disclosed in their Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, Aytu concluded that substantial doubt exists with respect to their ability to continue as a going concern within one year after the date that the financial statements were issued, or May 2023. As such, the Company fully reserved for the $1.0 million due in December 2024 and recognized the related expense in cost of product sales for the three and six months ended June 30, 2022. The remaining $0.9 million is included within other receivables and is contractually owed in the fourth quarter of 2022."

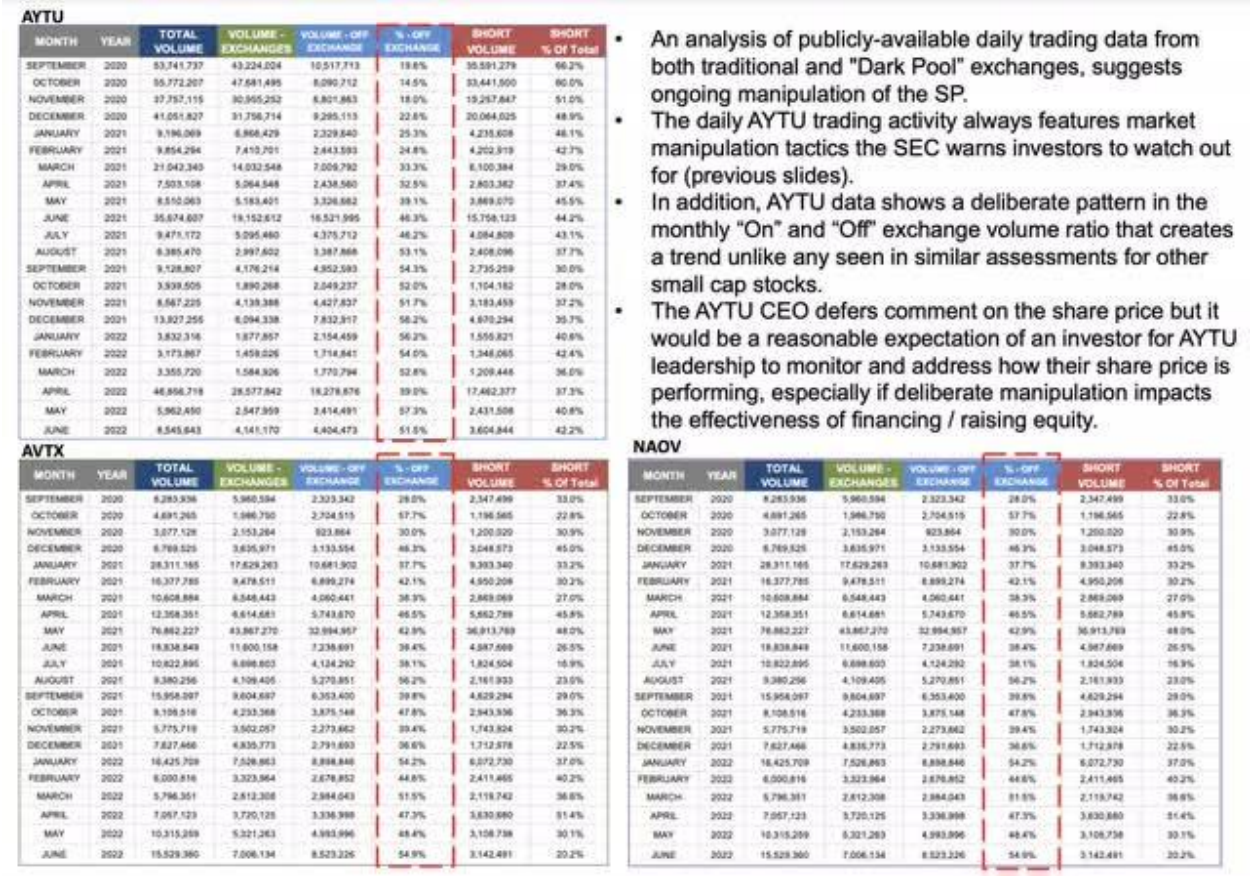
Despite what could only be classified as a significant issue and potential risk for investors, AYTU leadership has never addressed this with shareholders nor provided specific, detailed steps they are taking to mitigate this "substantial" risk. At the very least, it is reasonable for an investor to expect AYTU leadership to carefully review all details of their current equity situation in the markets to effectively execute their mitigation plan and provide shareholders with regular updates. This has never happened.

An analysis of the data from the daily equity trading activity demonstrates traits of share price manipulation as defined by the SEC, yet this is never addressed publicly by leadership despite the prevalence of financial professionals on the Board of Directors and as majority shareholders.




*SEC Market Manipulation Information (SEC)*

The daily Bid / Ask spreads and Order Fills suggest deliberate institutional actions to maintain the AYTU SP and market cap at an absurdly low valuation, even in the face of positive corporate developments. This is evident in the equity trading data history that features a trend in On / Off Exchange activity that is unlike the more random pattern typical of small-cap stocks, such as AVTX or NAOV, for example.



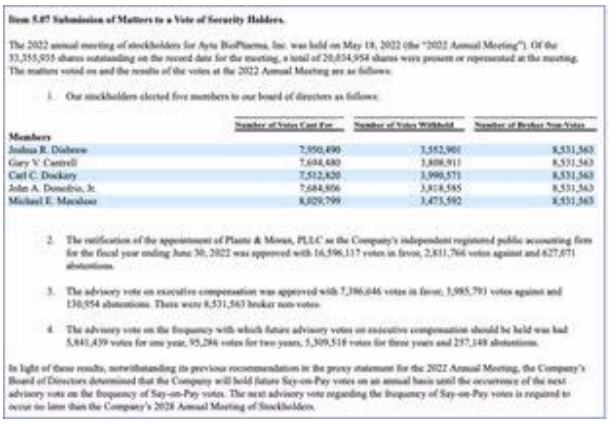

*Daily Trading Data Comparison (Chart Exchange)*

This deliberate SP manipulation preceded any general market downturn (in contrast to CFO Oki's claims) and has been underway since the close of the Neos acquisition in March 2021. What is required now is a more "forensic" review of that data by a regulatory body like the SEC to determine the origin of the trades, holders of the shares traded, and other factors to determine if any activities violated SEC regulations.

When you take a deeper dive into the events of each month during this timeframe, you discover that the trading activity also allowed certain investors to exit and re-enter the AYTU investment at opportune times, often under cover of orchestrated high volume, high-frequency trading events (the "pump & dump" schemes certain institutions use to create churn in the market). With a Board of Directors made up almost exclusively of investment experts and financial professionals and in consideration of the stated "substantial risk" to future financing in the AYTU 10-Q, why has there not been a formal response and investigation into this SP performance and other issues by AYTU leadership? Instead, the senior leadership team refuses to address or even comment on anything to do with the SP, suggesting complicity and collusion.

Considering all these issues and the absurdly low MC, it's also reasonable for an investor to expect the C-Suite and Board to analyze the current shareholder base through the data reported on in the voting during AYTU's most recent Annual Meeting in May, especially if leadership is concerned about raising equity. Analyzing the numbers from shares voting at the Annual

Meeting it is hard to believe that after a 10-1 R/S in December 2020 that significantly reduced the number of shares held, there can be 13M shares held by individuals or institutions that wouldn't take the time to voice their opinion after the dismal performance of AYTU stock and apathy of management.



Item 5.07 Submission of Matters to a Vote of Security Holders.

The 2022 annual meeting of stockholders for Ayto BioPharma, Inc. was held on May 18, 2022 (the "2022 Annual Meeting"). Of the 33,355,935 shares outstanding on the record date for the meeting, a total of 20,034,954 shares were present or represented at the meeting. The matters voted on and the results of the votes at the 2022 Annual Meeting are as follows:

1. Our stockholders elected five members to our board of directors as follows:

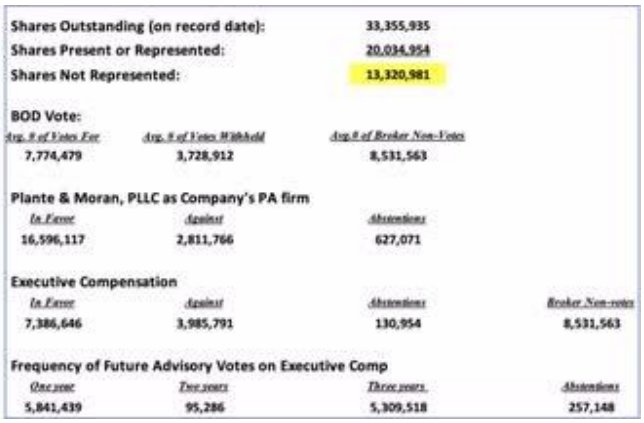
| Members | Number of Votes Cast For | Number of Votes Withheld | Number of Broker Non-Votes |
|---|---|---|---|
| Joshua R. Disbrow | 7,950,490 | 3,552,901 | 8,531,563 |
| Gary V. Cantrell | 7,684,480 | 3,808,911 | 8,531,563 |
| Carl C. Dockery | 7,512,820 | 3,990,571 | 8,531,563 |
| John A. Donofrio, Jr. | 7,684,806 | 3,818,585 | 8,531,563 |
| Michael E. Macaluso | 8,029,799 | 3,473,592 | 8,531,563 |

2. The ratification of the appointment of Plante & Moran, PLLC as the Company's independent registered public accounting firm for the fiscal year ending June 30, 2022 was approved with 16,596,117 votes in favor, 2,811,766 votes against and 627,071 abstentions.

3. The advisory vote on executive compensation was approved with 7,386,646 votes in favor, 3,985,791 votes against and 130,954 abstentions. There were 8,531,563 broker non-votes.

4. The advisory vote on the frequency with which future advisory votes on executive compensation should be held was had 5,841,439 votes for one year, 95,286 votes for two years, 5,309,518 votes for three years and 257,148 abstentions.

In light of these results, notwithstanding its previous recommendation in the proxy statement for the 2022 Annual Meeting, the Company's Board of Directors determined that the Company will hold future Say-on-Pay votes on an annual basis until the occurrence of the next advisory vote on the frequency of Say-on-Pay votes. The next advisory vote regarding the frequency of Say-on-Pay votes is required to occur no later than the Company's 2028 Annual Meeting of Stockholders.



| | |
|---|---|
| Shares Outstanding (on record date): | 33,355,935 |
| Shares Present or Represented: | 20,034,954 |
| Shares Not Represented: | 13,320,981 |

**BOD Vote:**

| Avg. # of Votes For | Avg. # of Votes Withheld | Avg # of Broker Non-Votes |
|---|---|---|
| 7,774,479 | 3,728,912 | 8,531,563 |

**Plante & Moran, PLLC as Company's PA firm**

| In Favor | Against | Abstentions |
|---|---|---|
| 16,596,117 | 2,811,766 | 627,071 |

**Executive Compensation**

| In Favor | Against | Abstentions | Broker Non-votes |
|---|---|---|---|
| 7,386,646 | 3,985,791 | 130,954 | 8,531,563 |

**Frequency of Future Advisory Votes on Executive Comp**

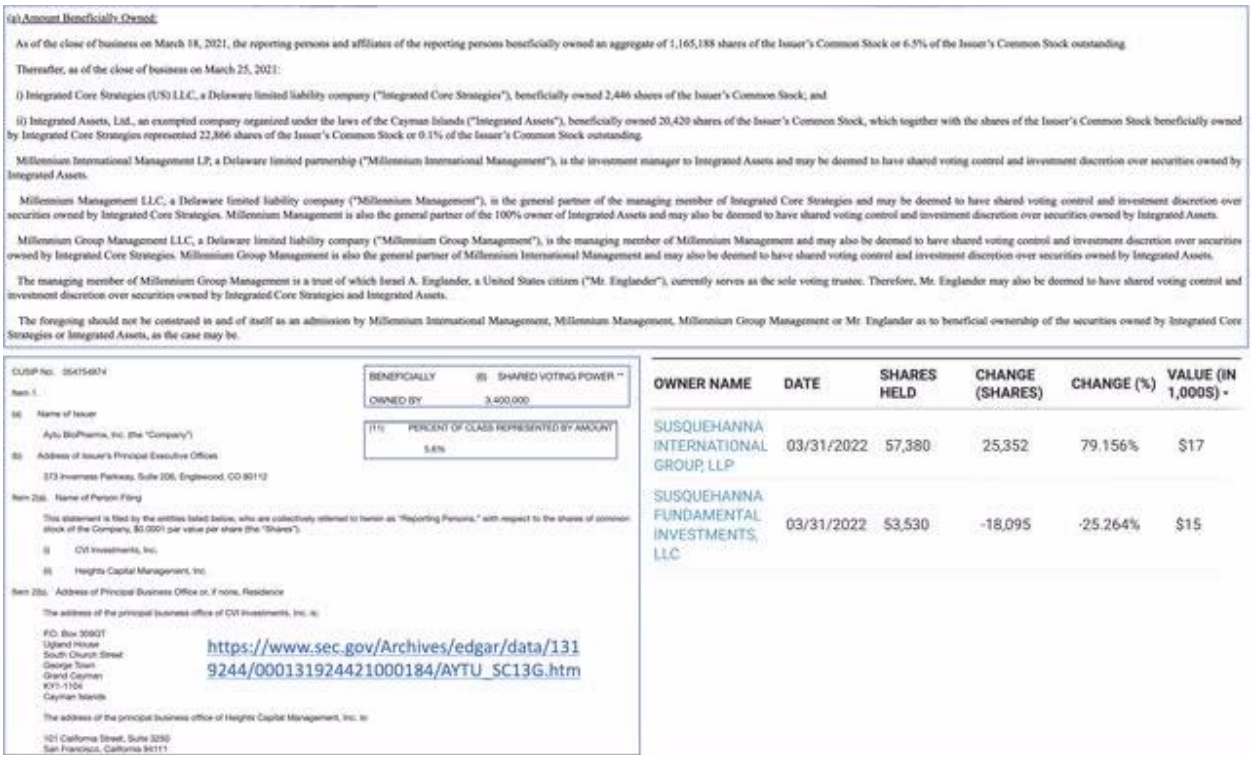
| One year | Two years | Three years | Abstentions |
|---|---|---|---|
| 5,841,439 | 95,286 | 5,309,518 | 257,148 |

*AYTU Annual Meeting Voting (Author)*

One interpretation of this data suggests that of the roughly 20M shares represented at the meeting, it can be broken down as: roughly 12 - 13M retail SH (# of Broker non-votes + # of Votes Withheld); leaving roughly 7 - 8M Institutional/Insider SH. I also suspect that of the roughly 13M shares unaccounted for at the meeting, at least 50% (but more likely 75%) are held by institutions often acting as market makers ("**MM**") and also those responsible for the market manipulation. The SEC could confirm this by tracing who holds the unaccounted-for shares. It is these millions of shares held in inventory that allowed the MM to churn over 48M volume in July 2022, primarily on the retail exchanges, likely to distribute dilution and continue to drive the SP down to even more ridiculous levels.

This issue is of additional interest because of the surprise SEC filing in March 2021 by Millennium Management (see below) that indicated the unloading of a significant ownership stake in AYTU that had not been previously reported in traditional SEC filings.

More recently, a SEC filing on August 15 2022 confirmed an over 5% ownership of AYTU by CVI, Inc. in an "offshore" account in the Caymans, all connected to Susquehanna, which owns Heights Capital Management and has been involved in the ongoing AYTU SP manipulation. One theory is that these institutions drive the SP down by manipulating trading by leveraging On and Off-exchange platforms, fully hedged with Calls and Puts, then take advantage of tax losses onshore before capitalizing on gains in offshore tax havens (read more about these tactics HERE).



(a) Amount Beneficially Owned:

As of the close of business on March 18, 2021, the reporting persons and affiliates of the reporting persons beneficially owned an aggregate of 1,165,188 shares of the Issuer's Common Stock or 6.5% of the Issuer's Common Stock outstanding.

Thereafter, as of the close of business on March 25, 2021:

i) Integrated Core Strategies (US) LLC, a Delaware limited liability company ("Integrated Core Strategies"), beneficially owned 2,446 shares of the Issuer's Common Stock; and

ii) Integrated Assets, Ltd., an exempted company organized under the laws of the Cayman Islands ("Integrated Assets"), beneficially owned 20,420 shares of the Issuer's Common Stock, which together with the shares of the Issuer's Common Stock beneficially owned by Integrated Core Strategies represented 22,866 shares of the Issuer's Common Stock or 0.1% of the Issuer's Common Stock outstanding.

Millennium International Management LP, a Delaware limited partnership ("Millennium International Management"), is the investment manager to Integrated Assets and may be deemed to have shared voting control and investment discretion over securities owned by Integrated Assets.

Millennium Management LLC, a Delaware limited liability company ("Millennium Management"), is the general partner of the managing member of Integrated Core Strategies and may be deemed to have shared voting control and investment discretion over securities owned by Integrated Core Strategies. Millennium Management is also the general partner of the 100% owner of Integrated Assets and may also be deemed to have shared voting control and investment discretion over securities owned by Integrated Assets.

Millennium Group Management LLC, a Delaware limited liability company ("Millennium Group Management"), is the managing member of Millennium Management and may also be deemed to have shared voting control and investment discretion over securities owned by Integrated Core Strategies. Millennium Group Management is also the general partner of Millennium International Management and may also be deemed to have shared voting control and investment discretion over securities owned by Integrated Assets.

The managing member of Millennium Group Management is a trust of which Israel A. Englander, a United States citizen ("Mr. Englander"), currently serves as the sole voting trustee. Therefore, Mr. Englander may also be deemed to have shared voting control and investment discretion over securities owned by Integrated Core Strategies and Integrated Assets.

The foregoing should not be construed in and of itself as an admission by Millennium International Management, Millennium Management, Millennium Group Management or Mr. Englander as to beneficial ownership of the securities owned by Integrated Core Strategies or Integrated Assets, as the case may be.

CUSIP No. 05475K874

Item 1.

(a) Name of Issuer

Aytu BioPharma, Inc. (the "Company")

(b) Address of Issuer's Principal Executive Offices

373 Inverness Parkway, Suite 206, Englewood, CO 80112

Item 2(a) Name of Person Filing

This statement is filed by the entities listed below, who are collectively referred to herein as "Reporting Persons," with respect to the shares of common stock of the Company, $0.0001 par value per share (the "Shares").

(i) CVI Investments, Inc.

(ii) Heights Capital Management, Inc.

Item 2(b) Address of Principal Business Office or, if none, Residence

The address of the principal business office of CVI Investments, Inc. is:

PO. Box 309GT
Ugland House
South Church Street
George Town
Grand Cayman
KY1-1104
Cayman Islands

The address of the principal business office of Heights Capital Management, Inc. is:

101 California Street, Suite 3250
San Francisco, California 94111

| (9) SOLE VOTING POWER | (6) SHARED VOTING POWER ** |
|---|---|
| BENEFICIALLY OWNED BY | 3,400,000 |

| (11) PERCENT OF CLASS REPRESENTED BY AMOUNT |
|---|
| 5.6% |

https://www.sec.gov/Archives/edgar/data/1319244/000131924421000184/AYTU_SC13G.htm

| OWNER NAME | DATE | SHARES HELD | CHANGE (SHARES) | CHANGE (%) | VALUE (IN 1,000S) |
|---|---|---|---|---|---|
| SUSQUEHANNA INTERNATIONAL GROUP, LLP | 03/31/2022 | 57,380 | 25,352 | 79.156% | $17 |
| SUSQUEHANNA FUNDAMENTAL INVESTMENTS, LLC | 03/31/2022 | 53,530 | -18,095 | -25.264% | $15 |

*Offshore Holdings in AYTU (SEC)*

AYTU did not respond to my questions on what steps leadership is taking to ensure they have a full understanding of their shareholder base and the specific market factors for their equity to support effective financing in the future. Instead, a $10M share offering was completed on August 15, 2022, for over 23M Common Shares and Warrants at exercise prices of $0.43 and $0.429, respectively, while the Share Price was close to an all-time low. With over $19M Cash on Hand, sufficient to fund operations until May 2023 (as confirmed in the previous 10Q and in the SEC filing for the offering), this public offering was driven by factors other than the immediate need for cash.

The offering announced on August 8th after hours resulted in a 50% drop in the share price, an obvious overreaction further supporting the theory of SP manipulation. Amidst all the other issues with AYTU, it is suspicious that the average daily Short Volume in the week leading up to the Offering announcement (Monday-Friday August 1-5, 2022) was 51.9% of the Total Volume reported, including 52.3% reported on Friday, August 5th before the announcement after trading hours the following Monday. The average daily Short Volume reported for the period of July 2021 – August 2022 was 36.5%. Considering all the other questionable trading and valuation concerns identified in these documents, leadership investigating why Short Volume would suddenly spike immediately preceding the public release of sensitive, confidential company information is a reasonable expectation, but no response was provided on this by AYTU when queried.

Armistice Capital exited their majority AYTU investment and their seat on the AYTU Board in the calendar year Q3 2021 when the share price was around $3 - 5, only to re-enter in calendar

year Q1 2022 at a significantly reduced share price of $1.25. Armistice then exited that position before the most recent June quarter-end and before the stock was walked down to the current dumpster level; likely all part of a master plan that Steven Boyd, the head of Armistice Capital, who served on the AYTU Board from 2018 to September 2021, would have had valuable insider information on. This kind of insider investment activity should warrant investigation, or at least C-Suite / Board commentary to reassure investors, especially in light of all the other information provided herein**.** It appears, based on a careful analysis of the AYTU history, that Armistice has led an ongoing campaign supported by other hedge funds and company leadership, to manipulate the company's equity to drive a strategy of asset collection and M&A. The tactics employed, however, appear to violate SEC rules and regulations and hurt retail investors.

In the last AYTU 10-K in September 2021 there was interesting information provided on the company's Employee Benefit Plan, which matches employee contributions to their 401K. Employee Benefits programs featuring "matching" funds to purchase company shares for an employee's 401k are a common "perk" in many public companies and are often promoted on a company's website to entice prospective recruits. In my question on this to AYTU, they would not confirm if the Company Plan is investing in AYTU shares. If they're not, it would seem reasonable for an investor to know, "why not?".

One final point regarding AYTU and insiders, the Senior Executives responsible for the AR101 Pipeline opportunity, Nate Massari and Topher Brooke, were awarded shares in lieu of the cash milestone payment for the progress with AR101 (confirmed in the last 10-Q) at these discounted levels but have not yet reported these shares in a SEC filing. AYTU has not responded to my request for clarification on this item.

**15. Employee Benefit Plan**

The Company has a 401(k) plan that allows participants to contribute a portion of their salary, subject to eligibility requirements and annual IRS limits. The Company matches 50% of the first 6% contributed to the plan by employees. The Company's match was approximately $0.3 million and $0.2 million during the years ended June 30, 2021 and 2020, respectively.

***Rumpus Earn Out Payments***

On April 12, 2021, the Company acquired substantially all of the assets of Rumpus, pursuant to which the Company acquired certain rights and other assets, including key commercial global licenses with Denovo Biopharma LLC ("Denovo") and Johns Hopkins University ("JHU"), relating to **AR101**. Upon the achievement of certain regulatory and commercial milestones, up to $67.5 million in earn-out payments, which are payable in cash or shares of common stock, generally at the Company's option, are payable to Rumpus. Under the license agreement with Denovo, the Company assumed the responsibility for paying annual maintenance fees of $25,000, a license option fee of $0.6 million payable in April 2022, and upon the achievement of certain regulatory and commercial milestones, up to $101.7 million, and escalating royalties based on net product sales ranging in percentage from the low teens to the high teens. Finally, under the license agreement with JHU, the Company assumed the responsibility for paying minimum annual royalties escalating from $5,000 to $20,000 beginning in calendar year 2022, royalties of 3.0% of net product sales, and upon the achievement of certain regulatory and commercial milestones, up to $1.6 million.

On December 7, 2021, upon receiving Orphan Drug Designation ("ODD") from the FDA for AR101, a milestone payment of $2.5 million is due and payable to Rumpus in cash or in shares of the Company's common stock. The $2.5 million milestone payment is included in our accrued liabilities in the condensed consolidated balance sheets as of March 31, 2022, and was paid in full on April 1, 2022.

On April 14, 2022, upon receiving Fast Track designation from the FDA for **AR101**, a milestone payment of $1.5 million is due and payable to Rumpus in cash or in shares of the Company's common stock. In May 2022, the Company issued 2,188,940 shares of common stock and $75,000 in cash for the full repayment of the amount due under the Fast Track designation milestone.

*AYTU Insider Shares (AYTU SEC Filings)*

In early July EVP Nate Massari left AYTU after achieving the major milestones for AR101 (described above). In many organizations, the departure of a prominent senior executive responsible for a critical pipeline opportunity would merit some acknowledgment by the company. Not for AYTU:

"We have and will continue to disclose if a Name Executive Officer leaves the company, but have not made it a practice to announce other departures."

The tally of departing senior leaders and directors continues to pile up. AYTU is on its 3rd CFO in two years and had two Board members, who were appointed as part of the Neos acquisition, resign almost immediately when the rest of the Board refused to even acknowledge their initial concerns. This is the cost of bad governance and it's the shareholders that pay the price.

## Development of the "Healight" Pipeline Asset

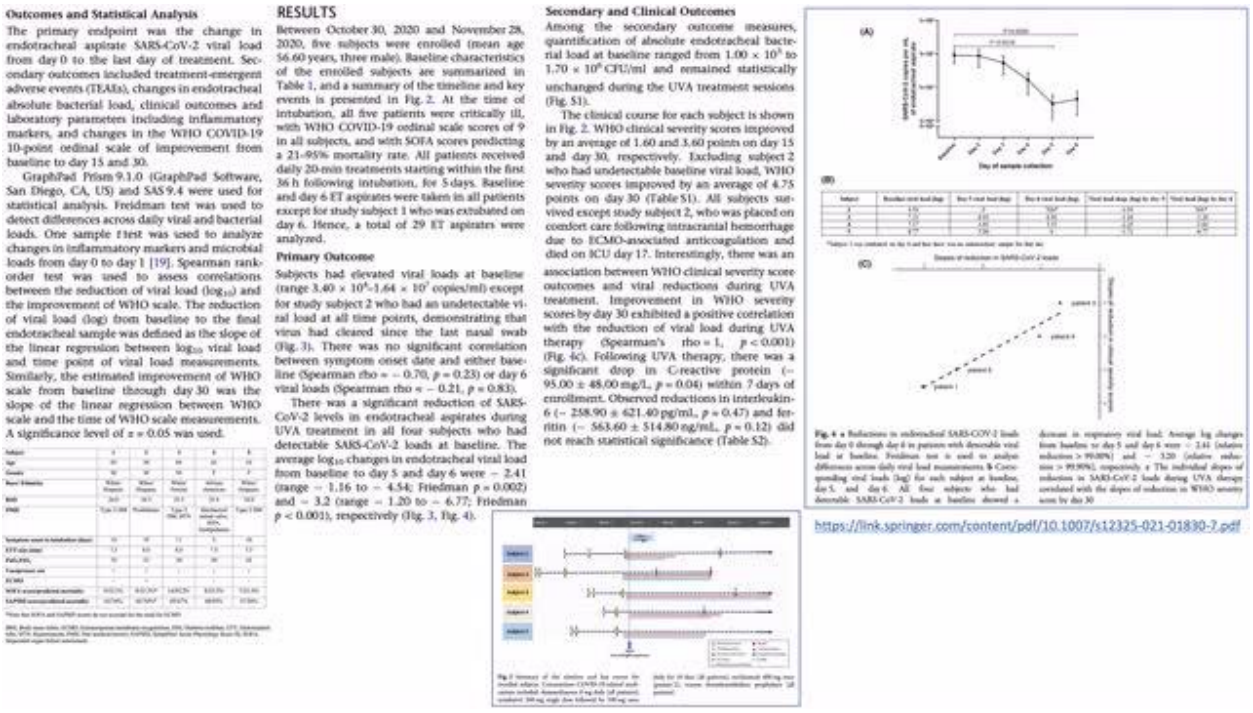
The preliminary formal notification of the next phase "Healight" clinical trial start date was first published by AYTU in December 2021 through the NIH's website but since then the actual start date has been repeatedly pushed out; including most recently from June to July 2022, a six-month delay from the original December 2021 date, without any explanation to shareholders. These repeated delays in officially starting this critical trial demand an explanation from

leadership, especially after what would appear to be an extremely successful “pilot” study and ongoing clinical research.

AYTU also never informed investors of the first porcine pretrial study in support of the pending human clinical trial. The study was only announced publicly in April 2022 upon its completion. AYTU has not confirmed or commented on whether the 2nd porcine study, announced in the PR, is responsible for the delay in the start of the human clinical trial.

Another interesting and unaddressed issue in the development of this breakthrough medical technology is the role of Cedars-Sinai, which is frequently an engaged investor in companies that are helping progress their inventions. Given the risks AYTU identified in the last 10-Q, a reasonable inquiry for an investor would be whether this avenue had been explored for AYTU funding support. Investors want to know why Cedars-Sinai is OR IS NOT interested in investing in the specific application of the internal UV light technology that AYTU has the rights to, and/or more likely, why they are not interested in investing in AYTU.

The AYTU Corporate Presentation states that a successful trial outcome for AR101 represents a potential $1B estimated market for this AYTU Fast Track / Orphan status drug, demonstrating that leadership is not averse to forecasting the potential revenue opportunity for a pipeline treatment. Why has a potential TAM and revenue estimate never been provided by leadership for Healight, especially amidst a preponderance of successful outcomes in all the clinical trials and research done on this innovative technology? Healight appears extremely close (the first trial required only 5 days of treatment per patient) to providing substantial proof of effectiveness or non-effectiveness for treating a variety of microbes and viruses yet investors are kept largely in the dark on progress.



**Outcomes and Statistical Analysis**

The primary endpoint was the change in endotracheal aspirate SARS-CoV-2 viral load from day 0 to the last day of treatment. Secondary outcomes included treatment-emergent adverse events (TEAEs), changes in endotracheal absolute bacterial load, clinical outcomes and laboratory parameters including inflammatory markers, and changes in the WHO COVID-19 10-point ordinal scale of improvement from baseline to day 15 and 30.

GraphPad Prism 9.1.0 (GraphPad Software, San Diego, CA, US) and SAS 9.4 were used for statistical analysis. Freidman test was used to detect differences across daily viral and bacterial loads. One sample *t* test was used to analyze changes in inflammatory markers and microbial loads from day 0 to day 1 [19]. Spearman rank-order test was used to assess correlations between the reduction of viral load ($log_{10}$) and the improvement of WHO scale. The reduction of viral load (log) from baseline to the final endotracheal sample was defined as the slope of the linear regression between $log_{10}$ viral load and time point of viral load measurements. Similarly, the estimated improvement of WHO scale from baseline through day 30 was the slope of the linear regression between WHO scale and the time of WHO scale measurements. A significance level of $\alpha = 0.05$ was used.

**RESULTS**

Between October 30, 2020 and November 28, 2020, five subjects were enrolled (mean age 56.60 years, three male). Baseline characteristics of the enrolled subjects are summarized in Table 1, and a summary of the timeline and key events is presented in Fig. 2. At the time of intubation, all five patients were critically ill, with WHO COVID-19 ordinal scale scores of 9 in all subjects, and with SOFA scores predicting a 21–95% mortality rate. All patients received daily 20-min treatments starting within the first 36 h following intubation, for 5 days. Baseline and day 6 ET aspirates were taken in all patients except for study subject 1 who was extubated on day 6. Hence, a total of 29 ET aspirates were analyzed.

**Primary Outcome**

Subjects had elevated viral loads at baseline (range $3.40 \times 10^5$–$1.64 \times 10^7$ copies/ml) except for study subject 2 who had an undetectable viral load at all time points, demonstrating that virus had cleared since the last nasal swab (Fig. 3). There was no significant correlation between symptom onset date and either baseline (Spearman rho = − 0.70, $p = 0.23$) or day 6 viral loads (Spearman rho = − 0.21, $p = 0.83$).

There was a significant reduction of SARS-CoV-2 levels in endotracheal aspirates during UVA treatment in all four subjects who had detectable SARS-CoV-2 loads at baseline. The average $log_{10}$ changes in endotracheal viral load from baseline to day 5 and day 6 were − 2.41 (range − 1.16 to − 4.54; Friedman $p = 0.002$) and − 3.2 (range − 1.20 to − 6.77; Friedman $p < 0.001$), respectively (Fig. 3, Fig. 4).

**Secondary and Clinical Outcomes**

Among the secondary outcome measures, quantification of absolute endotracheal bacterial load at baseline ranged from $1.00 \times 10^5$ to $1.70 \times 10^6$ CFU/ml and remained statistically unchanged during the UVA treatment sessions (Fig. 5i).

The clinical course for each subject is shown in Fig. 2. WHO clinical severity scores improved by an average of 1.60 and 3.60 points on day 15 and day 30, respectively. Excluding subject 2 who had undetectable baseline viral load, WHO severity scores improved by an average of 4.75 points on day 30 (Table S1). All subjects survived except study subject 2, who was placed on comfort care following intracranial hemorrhage due to ECMO-associated anticoagulation and died on ICU day 17. Interestingly, there was an association between WHO clinical severity score outcomes and viral reductions during UVA treatment. Improvement in WHO severity scores by day 30 exhibited a positive correlation with the reduction of viral load during UVA therapy (Spearman's rho = 1, $p < 0.001$) (Fig. 4c). Following UVA therapy, there was a significant drop in C-reactive protein (− 95.00 ± 48.00 mg/L, $p = 0.04$) within 7 days of enrollment. Observed reductions in interleukin-6 (− 258.90 ± 621.40 pg/ml., $p = 0.47$) and ferritin (− 563.60 ± 514.80 ng/mL, $p = 0.12$) did not reach statistical significance (Table S2).

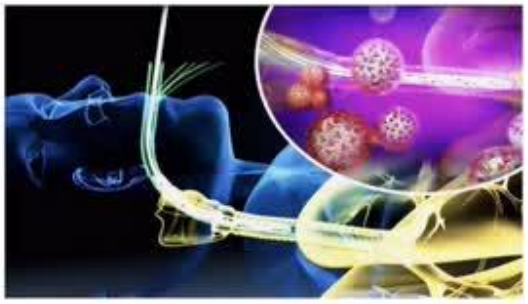
https://link.springer.com/content/pdf/10.1007/s12325-021-01830-7.pdf

*Results from the 2020 "Pilot" Trial (NIH)*

A rough estimate of the potential TAM for Healight suggests billions of dollars in annual sales globally. Amidst the “Substantial Risk” from the 10-Q and the leadership-proposed “mitigation” (identified in the previous sections), as well as the TAM forecast the AYTU CEO provided for AR101, why would AYTU not confirm to investors the potential value assigned to Healight as a pipeline asset?

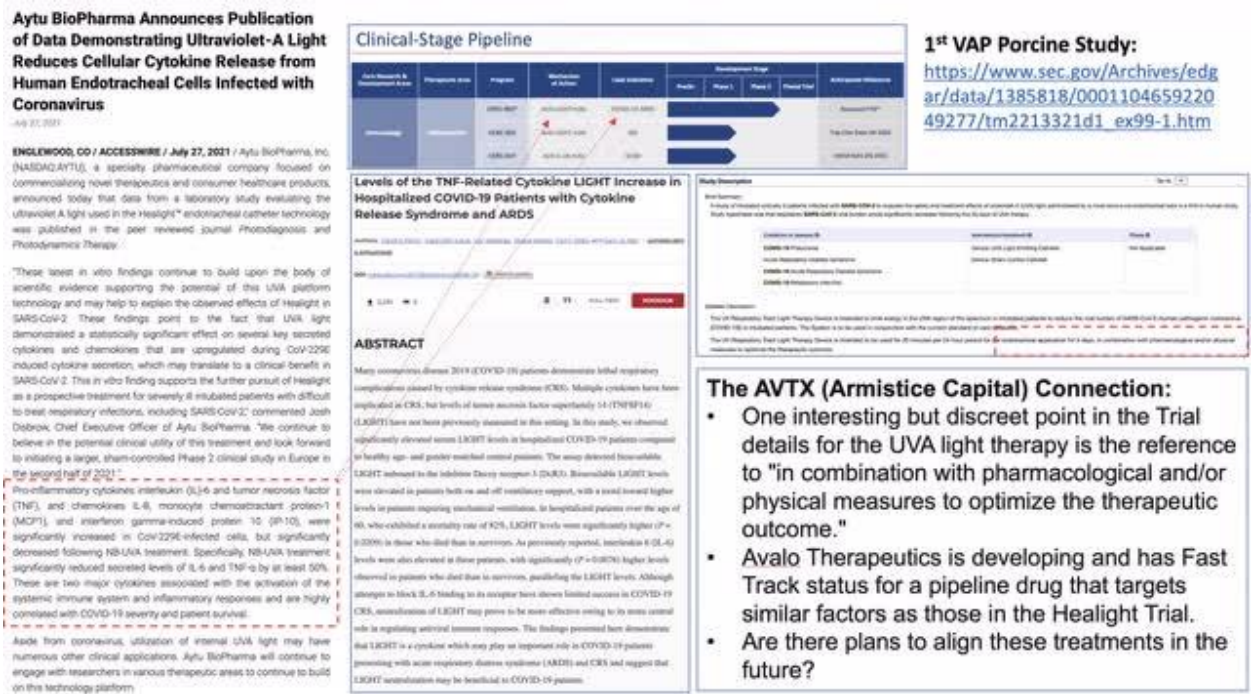
**Healight "Cocktail Napkin" Asset Valuation:**

- Rough estimates for the price of the Healight device start at around $50-100k (based on other state-of-the-art medical devices), while catheters may sell for anywhere from $5k to over $25k. These rough numbers facilitate some simple math:
  - There are currently over 300k VAP cases in the U.S. per year.
  - Across the U.S. there are around 6,150 hospitals.
  - You could envision every hospital having at least one Healight device but possibly more, perhaps 5 - 10.
- The potential markets include patients with chronic infections, rhinosinusitis, bacterial infections, and bronchitis, to name a few: a multi-billion-dollar opportunity just in the U.S. alone. Then there is the global market to consider!
- The ability to add something as effective as Healight to reduce viral and bacterial load, and potentially improve outcomes to minimize the number of days in the ICU (i.e. getting patients discharged faster) could save the healthcare system a lot of effort and cost.
- The value proposition is enormous and Aytu has a "first-mover advantage" with this technology thanks to the patent protections, and the benefit of human trial regulatory requirements for approval that any competing device will need to overcome. **A very deep "moat"!**

*"Rough" Potential Valuation for Healight Asset (Author)*

The use of Healight in conjunction with other pharmaceutical drugs was noted by its inventor Dr. Rezaie in a recent video that reiterated the prospects for this breakthrough technology. Amidst all the other concerns expressed herein, a suspicion exists that certain investors and stakeholders have been provided with greater insight into the development and value of this asset, driving what appears to be deliberate market manipulation. For example...




*AYTU Healight and AVTX (Avalo Therapeutics)*

## Other AYTU Assets and the Current Market Cap Valuation

To do proper "Price Discovery", an investor SHOULD include all assets the company owns the rights to then apply quantitative and qualitative fundamentals to determine the potential value of a company relative to its current market valuation. Interestingly, the two Wall Street analysts providing formal coverage of AYTU (H.C. Wainwright and Cantor Fitzgerald) have provided share price projections of $6 and $5, respectively, but neither of these SP forecasts includes the Healight or AR101 pipeline opportunities. They only include the commercialized assets (more on this later).

## The AR101 Orphan Drug Opportunity

- Regarding a fair "valuation" based on forecasted future DCF, here's some interesting math: assuming AR101 is successful in the late-stage trials starting 2023, future annual revenue could be very significant. There are 6,000-8,000 vEDS patients in the US. Conservatively we can assume there are at least another 25,000 vEDS patients worldwide. Research suggests an average price tag of US$10,000 / year per patient to treat rare diseases. Treating 35,000 vEDS patients per year with AR101 at the average cost cited in the study, AYTU could see potential annual revenues of $350M from this pipeline drug; and the patent would have longer protection from competition because of the Orphan status.
- Two clinical trials are currently underway with Enzastaurin and both were able to commence in a late-stage because of all of the previous studies done on this molecule, which Lilly gave up on but it appears they may have been targeting the wrong type of tumor. A post-mortem assessment by Lilly of the failed trial came to a similar conclusion.



*AYTU's AR101 Pipeline Asset*

AR101 and Healight are the two prominent AYTU pipeline assets, but there are also many other assets that AYTU has promoted in the past or, as is often the case with AYTU, were uncovered by inquisitive retail investors through their own due diligence. Investors are provided either very little or generally misleading information on these various "overlooked" opportunities.

For example, there has been very little disclosure by AYTU on the development of what was known as NT0502, one of only a few potential treatments for the rare disease sialorrhea, which the CEO and other key stakeholders emphasized in public forums to promote AYTU's acquisition of Neos Therapeutics. Neos' Chief Executive Officer, Jerry McLaughlin, stated:

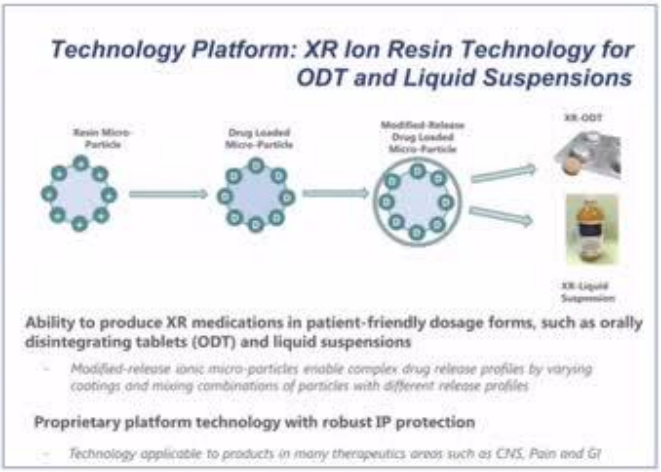
"I firmly believe Aytu BioScience is the right partner to continue the exceptional work our team has done to build the ADHD franchise into what it is today and to continue the development of NT0502 for the treatment of sialorrhea."


*The "Forgotten" NT0502 Asset*

Another asset acquired in the Neos Therapeutics acquisition was the XR-oral disintegrating tablet (ODT) technology known as Rapidly Disintegrating Ionic Masking ("RDIM"). This asset was also heralded by AYTU leadership as a very promising technology that could add value to a variety of other applications. Unfortunately, there has been minimal to no further information provided to investors on how AYTU is developing this opportunity or what is being done by leadership to further monetize the RDIM technology.

## The "rarely-mentioned" Rapidly Disintegrating Ionic Masking (RDIM) Technology Opportunity

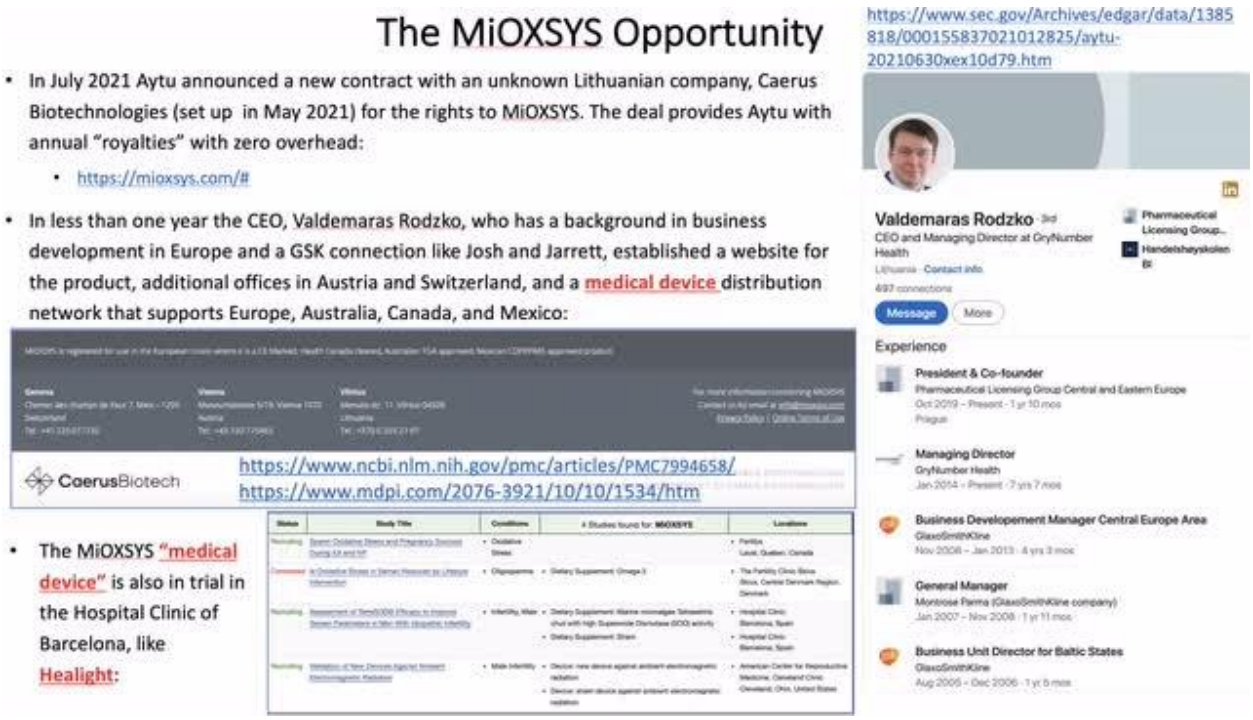
- Another asset obtained in the Neos Therapeutics acquisition: XR-oral disintegrating tablet (ODT) technology, known as Rapidly Disintegrating Ionic Masking (RDIM):
- This also was heralded by Aytu leadership as very promising technology that could add value in a variety of different applications.
- Unfortunately there has been minimal to no further information provided to investors on how the company is acting responsibly in the best interests of their public investors to develop this and other opportunities, which are supported in large part from equity raised in the regulated public markets.




http://test.pharmabiz.com/news/neos-therapeutics-xr-odt-platform-technology-receives-us-patent-84525).

*Aytu's RDIM Technology Asset*

The MiOXSYS medical device, offloaded last year through an agreement with a private company, Caerus Biotech, that includes annual performance "royalties" for AYTU, appears to be progressing very well under its new owners, including being featured prominently in a clinical trial in the Barcelona Hospital where Healight is being trialed and establishing a distribution network. Despite these advancements, investors have not been informed on how much revenue the royalty arrangement generated thus far and what AYTU expects to receive in returns from this over the next three to five years. This device is considered "best in class" in the male fertility testing market, which has a significant TAM.




*The MiOXSYS Device*

Earlier in the year, terrific retail investor due diligence uncovered a website linking AYTU with Amman Pharmaceutical Industries, a private middle eastern pharmaceutical company with a diverse array of products and services, including drug contract manufacturing, which is a front-burner initiative for AYTU. Eventually, AYTU provided a brief note on the relationship in the last 10-Q. It would appear, however, from FDA filings that this "material" relationship between Amman Pharmaceuticals and AYTU formally dates to at least November 2021, despite the public first formally hearing about it in May 2022. AYTU leadership chose to deliberately delay informing investors about this relationship and continues to play down its significance while an extreme undervaluation of AYTU persists in the market. I have reached out to the North American representative of API to discuss but have yet to receive a response.


*AYTU-Amman Pharmaceuticals Connection (Author)*

When questioned about what appeared to be a more complex relationship than formally acknowledged, AYTU's response was:

"The contract manufacturing you reference on the Aytu-branded website is an exploratory project we are evaluating with Amman Pharmaceuticals and is unrelated to the manufacture of our prescription products. To date, there have been no material agreements or revenues generated from this project. We are evaluating the viability of this potential business line and will discuss it in greater depth should it become material to our operations.

Why are details on all of the AYTU assets important? Back in September 2021, the Cantor Fitzgerald analyst covering AYTU provided a detailed assessment of projected financial performance to FY2030 (see table below). It resulted in a 12-month SP forecast from Cantor of $11, not including potential revenue from any of the pipeline or other promising assets described herein. That forecast has since been revised down to $5 despite the solid development with all of these assets and with strong progress towards profitability, which was the two key pillars supporting Cantor's "Bullish" case scenario for AYTU. Add the possible revenue from all the "ignored" AYTU assets to CF's forecasts and the projected SP should be multiples of their stated targets. This underscores why full disclosure is so important to proper Price Discovery.

CANTOR Fitzgerald

**Exhibit 4: Income Statement Analysis 2020 to 2030E**

September 27, 2021

*($ in Millions, except per share amounts)*

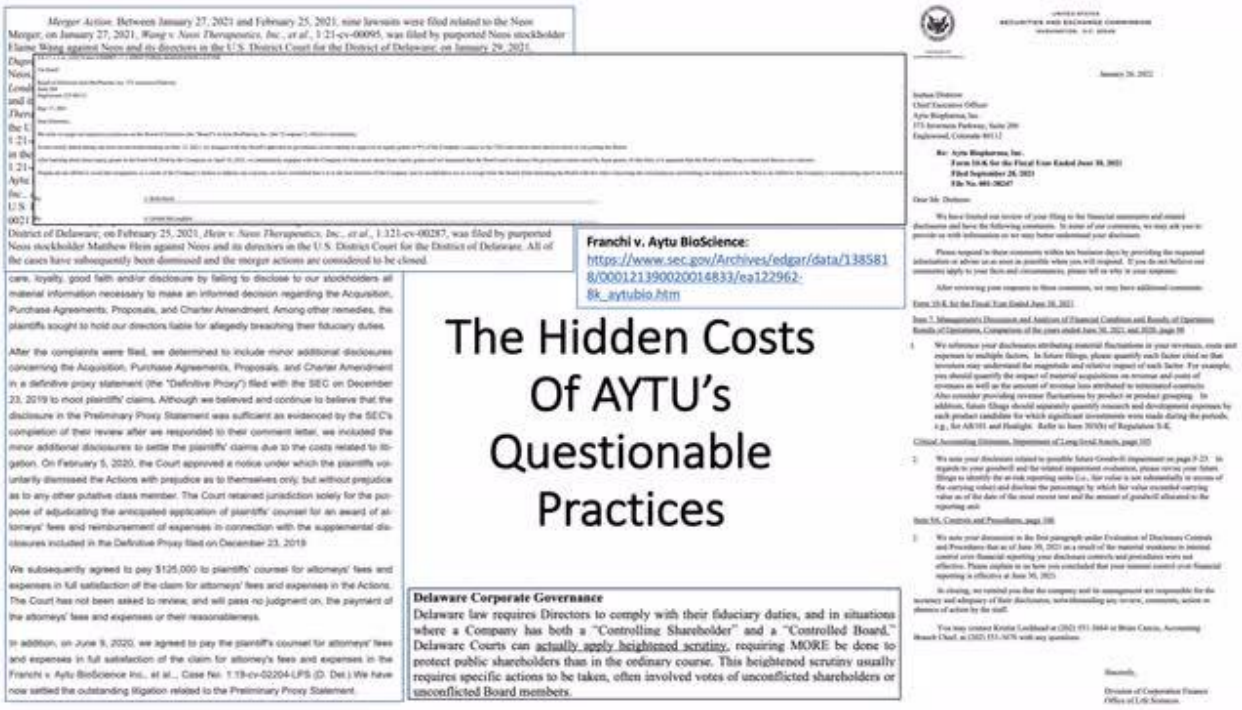
| (Year Ended June 30) | 2020 | 1Q21A | 2Q21A | 3Q21A | 4Q21A | 2021 | 1Q22E | 2Q22E | 3Q22E | 4Q22E | 2022E | 2023E | 2024E | 2025E | 2026E | 2027E | 2028E | 2029E | 2030E | CAGR 22E-30E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Revenue** | $27.6 | $13.5 | $15.1 | $13.5 | $23.5 | $65.6 | $22.7 | $26.9 | $29.0 | $28.2 | $106.8 | $118.5 | $128.9 | $140.4 | $153.2 | $163.9 | $187.1 | $219.9 | $253.8 | 16.5 |
| COGS | 7.6 | 3.8 | 6.0 | 13.7 | 12.2 | 35.7 | 9.5 | 11.3 | 12.1 | 11.9 | 44.7 | 41.8 | 42.7 | 46.2 | 52.3 | 57.5 | 65.6 | 76.3 | 87.3 | |
| Gross Profit | 20.1 | 9.7 | 9.1 | (0.2) | 11.3 | 29.9 | 13.2 | 15.7 | 16.9 | 16.3 | 62.0 | 76.7 | 86.2 | 94.3 | 100.9 | 106.4 | 121.4 | 143.6 | 166.5 | |
| SG&A | 34.8 | 11.5 | 12.9 | 12.9 | 20.7 | 57.9 | 18.4 | 18.6 | 18.9 | 19.1 | 75.0 | 75.4 | 75.8 | 76.1 | 76.5 | 76.9 | 77.3 | 77.7 | 78.1 | |
| R&D | 1.7 | 0.2 | 0.3 | 0.4 | 4.8 | 5.6 | 3.0 | 7.1 | 4.0 | 4.4 | 18.5 | 45.0 | 45.0 | 21.5 | 15.0 | 15.3 | 15.6 | 15.9 | 16.2 | |
| Other (Income)/Expense | 4.7 | 1.6 | 1.6 | 12.2 | 9.9 | 25.3 | 4.4 | 4.5 | 4.5 | 4.6 | 18.0 | 18.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | |
| **Total Operating Expense** | $41.2 | $13.3 | $14.7 | $25.5 | $35.4 | $88.8 | $25.8 | $30.2 | $27.4 | $28.1 | $111.5 | $138.4 | $135.8 | $112.6 | $106.5 | $107.2 | $107.9 | $108.6 | $109.3 | |
| **Operating Income** | ($21.1) | ($3.6) | ($5.6) | ($25.7) | ($24.1) | ($58.9) | ($12.6) | ($14.5) | ($10.6) | ($11.9) | ($49.5) | ($61.7) | ($49.6) | ($18.4) | ($5.7) | ($0.8) | $13.5 | $35.0 | $57.2 | 105.5 |
| **Non-Operating Items** | 7.5 | (0.7) | (4.0) | 0.2 | 5.3 | 0.8 | (0.5) | (0.5) | (0.5) | (0.5) | (2.2) | (2.2) | (2.2) | (2.2) | (2.2) | (2.2) | (2.2) | (2.2) | (2.2) | |
| Pre-tax Income | ($13.6) | ($4.3) | ($9.5) | ($25.5) | ($18.7) | ($58.0) | ($13.1) | ($15.0) | ($11.1) | ($12.4) | ($51.7) | ($63.8) | ($51.8) | ($20.5) | ($7.8) | ($2.9) | $11.4 | $32.8 | $55.0 | |
| Tax Rate | 0.0% | 0.0% | 0.0% | 0.0% | -1.4% | -0.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 23.0% | 23.0% | 23.0% | |
| Taxes | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 7.6 | 12.6 | |
| **Net Income** | ($13.6) | ($4.3) | ($9.5) | ($25.5) | ($19.0) | ($58.3) | ($13.1) | ($15.0) | ($11.1) | ($12.4) | ($51.7) | ($63.8) | ($51.8) | ($20.5) | ($7.8) | ($2.9) | $8.7 | $25.3 | $42.3 | 120.1 |
| Average Shares Diluted (a) | 4.5 | 12.2 | 13.3 | 18.1 | 23.5 | 16.7 | 27.5 | 31.3 | 31.5 | 31.7 | 30.3 | 38.0 | 43.4 | 43.6 | 43.9 | 44.1 | 44.4 | 44.6 | 44.9 | |
| **Diluted EPS** | ($3.01) | ($0.35) | ($0.72) | ($1.41) | ($0.81) | ($3.48) | ($0.48) | ($0.48) | ($0.35) | ($0.39) | ($1.70) | ($1.68) | ($1.19) | ($0.47) | ($0.18) | ($0.07) | $0.20 | $0.57 | $0.94 | 118.9 |
| **% Change YOY** | | | | | | | | | | | | | | | | | | | | |

*Cantor Fitzgerald's Income Projections for AYTU (October 2021)*

In light of the deficiencies identified by the SEC in asset valuation by AYTU leadership (referenced earlier), it would be reasonable for an investor to expect leadership to provide timely and fulsome updates on ALL of their pipeline opportunities and "exploratory" initiatives, but those requests have not been addressed. Like most everything in AYTU's history, there is a pattern of deception and deliberate moves made to cover their tracks or do the "bare minimum" to cover their exposure from a legal perspective (such as the move to add a new "independent" Board member from the Innovus legacy to add an air of propriety to their executive compensation schemes).

## Conclusion

The latest, egregious action by leadership occurred on August 15, 2022 after hours when they released a Proxy Statement calling for a special Shareholders Meeting on October 4th to vote on a Reverse Split at a ratio of up to 1 to 20, and based on shareholders of record as of August 11th, 2022, after the most recent offering of over 23M shares and warrants. This type of action is further evidence of the historical and ongoing AYTU approach of "questionable behavior and practices" that favors certain investors and stakeholders at the expense of others.




*The Hidden Costs of Bad Practices*

While investors need to take responsibility and manage their risk, there is also a reasonable expectation on the part of consumers that people in leadership positions of public entities will uphold their "duty of care" to all stakeholders. When this line is crossed, it is up to the regulatory bodies tasked with overseeing those marketplaces to investigate and, if necessary, intervene. I have submitted my concerns to the Securities & Exchange Commission (SEC Investor Complaint Form) to review these perceived issues and render a professional opinion on their merits.

There appears to be a great deal of value in the AYTU assets and the Company's resources but this will never be reflected in the share price or market cap until those responsible for the corruption are held accountable. The ends never justify the means when those ends are based on deception and cause harm to many while enriching a few.