

SUMMARY**3Q '19 catalyst, CBD treatment for Fragile X**

SanaCurrents is providing a **pivotal** sentiment rating to the results of a phase II study of ZYN002, a cannabidiol (CBD) gel compound from Zynerba Pharmaceuticals (NASDAQ: ZYNE) to treat 3- to 17-year-old patients with Fragile X syndrome. The primary assessments in the phase II study, named CONNECT-FX, should be completed in July 2019 and final evaluations of the data by October 2019.

ZYN002 became the primary focus of Zynerba in the last 12 months after another drug, ZYN001, faltered in an epilepsy trial in 2017. Zynerba essentially ceded the epilepsy market to GW Pharmaceuticals (OTC: GWPRF) after GW's CBD-based drug Epidiolex gained FDA approval in June 2018.

The approval of GW's Epidiolex benefits Zynerba, creating a clear path for CBD-based drugs that can demonstrate clinical efficacy in important diseases. After Epidiolex, the US Drug Enforcement Agency (DEA) in September issued a guideline stating CBD drugs with THC content below 0.1% are now considered Schedule 5 drugs, as long as they are FDA approved. Until September, all cannabis-based formulations were regarded as Schedule 1 drugs, a federal law category reserved for drugs with a high potential for abuse and no medical value, thereby invalidating CBD drugs for commercial use. The DEA guideline creates a new avenue to patients for drugs such as Epidiolex and ZYN002.

Like GW's Epidiolex, ZYN002 addresses a significant unmet need. There are no approved therapies to treat Fragile X syndrome. Moreover, the patient population is genetically identified. In 2016, Zynerba received orphan drug designation for ZYN002.

THE EDGE

Parents of children with Fragile X have been using CBD products, obtained at medical marijuana dispensaries, as treatments for the past several years, according to a Fragile X researcher. While the dosage is not precise, the results are impressive – fewer uncontrolled outbreaks, less withdrawal and calmer behavior. As a result, parents have been networking on their own to determine the best CBD options, said the researcher. ZYN002 can deliver a controlled, prescription treatment alternative, if the CONNECT-FX results are positive.

Zynerba likewise holds an advantage in advancing ZYN002 through its transdermal delivery (skin patch) and the first synthetic CBD formulation as a permeation-enhanced gel. Transdermal delivery allows ZYN002 to bypass the GI tract and the consequent ability of stomach acids to degrade CBD into trace levels of THC, the compound in cannabis plants that produces a psychoactive effect. This in turn leads to more efficient uptake of the liver and reduces potential GI side effects. Also by producing CBD as synthetic oil, Zynerba should avoid the manufacturing challenges and costs of greenhouse production.

**PROBABILITY SENTIMENT****Pivotal****Key Catalyst(s)**

phase II study of ZYN002 to treat Fragile X

Key Catalyst Dates

- Q3 2019

Insider & Institutional Holdings

16.07% % of Shares Held by All Insider

18.36% % of Shares Held by Institutions

21.87% % of Float Held by Institutions

82 Number of Institutions Holding Shares

Location

80 West Lancaster Avenue

Suite 300

Devon, PA 19333

United States

Executives

Armando Anido, Chief Executive Officer

Terri B. Sebree, President

Jim Fickenscher, Chief Financial Officer

Joe Apostolico, Vice President, Human Resources

Donna L. Gutterman, PharmD, Vice President, Medical

Suzanne M. Hanlon, Vice President and General Counsel

[More...](#)

Website

<http://www.zynerba.com>

Zynerba Pharmaceuticals, Inc. (ZYNE) Probability Sentiment

One potential flag for ZYN002 is the outcomes are measured by user-recorded data, which can be unreliable if patients are not consistent with their data entries. This problem frequently arises in studies of central nervous system (CNS) drugs. However, given the parent involvement in advancing a treatment for Fragile X, it should not be a concern.

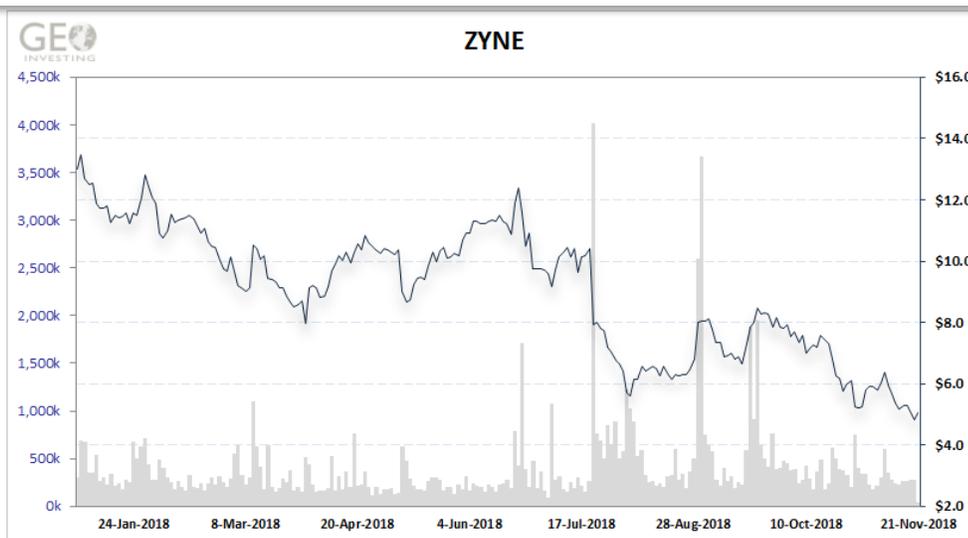
After Zynerba reported positive 12-week results of its 20-patient, ZYN002 open label study in Fragile X patients in September 2017, the company's shares rose 42% the next day. That study enrolled patients between 6 and 17 years of age, with a 3:1 ratio in favor of males. The mean age was 10.6.

Zynerba has since reported ZYN002 sustained improvement of core behavioral symptoms of FXS with statistical significance versus baseline through 38 weeks of treatment. In one example, significant improvements vs. baseline in social avoidance as measured by the ABC-CFXS were demonstrated at 12 weeks (58%; $p=0.0040$) and 38 weeks (75%; $p=0.0013$) of treatment with ZYN002.

For the CONNECT-FX trial, Zynerba has expanded the 204-patient trial to be conducted at 20 locations in New Zealand, Australia and the US. The company also has hired a manager in Australia for the Australia and New Zealand locations, and recruited local autism specialists to lead the studies at individual locations.

While Zynerba also is testing ZYN002 in two other indications, the company recently closed a \$30 million financing aimed at completing the CONNECT-FX trial on time.

Zynerba's stock is approaching its 52-week low. Depending on the length of the recent market turbulence, an entry into ZYNE over the next two months could prove to be beneficial by the second half of 2019, when the CONNECT-FX results are announced.



| Zynerba Pharmaceuticals, Inc. (ZYNE) | | data provided by | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------|---|------------|-----------|------------|------------|---------|-------|-------|-------|--------------|-------|-------|-------|--------------|------|------|------|------------------|---------|---------|---------|------------------|--|--|--|------------|--------|--------|--------|-----|-------|-------|-------|--|--|------------|----------|--|-----------|---------|-----|---------|-----|--|-----------|--|---|--|-------------------|------------|------|--------------|-------|-------------|------|------------|--------|---------------|--------|---------------|--------|----------------|--------|
| <p>Zynerba Pharmaceuticals, Inc. operates as a clinical stage specialty pharmaceutical company. The company focuses on developing and commercializing pharmaceutically-produced transdermal cannabinoid treatments for rare or near-rare neuropsychiatric disorders. Its product candidates include ZYN002, which completed Phase II clinical trial for pediatric and adolescent patients with fragile X syndrome, pediatric and adolescent patients with developmental and epileptic encephalopathies, and adult patients with refractory epileptic focal seizures; and ZYN001 that is in Phase I clinical trial to treat Tourette syndrome. The company was formerly known as AllTranz, Inc. and changed its name to Zynerba Pharmaceuticals, Inc. in August 2014. Zynerba Pharmaceuticals, Inc. was founded in 2007 and is headquartered in Devon, Pennsylvania.</p> | | <p>GICS Sector Pharmaceuticals GICS Industry Health Care</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <p>Next FQ/FH End Date 12/31/2018 Next FY End Date 12/31/2018 Next Earnings Date Latest Earnings Date 11/07/2018</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p><i>*in millions USD, except per share data</i></p> | | <p>FIN. SUMMARY</p> <table border="1"> <thead> <tr> <th>Period end</th> <th>2/31/2017</th> <th>12/31/2018</th> <th>12/31/2019</th> </tr> </thead> <tbody> <tr> <td>Revenue</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>Gross Profit</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>Gross Margin</td> <td>0.0%</td> <td>0.0%</td> <td>0.0%</td> </tr> <tr> <td>Operating Profit</td> <td>(32.82)</td> <td>(43.51)</td> <td>(49.64)</td> </tr> <tr> <td>Operating Margin</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Net Income</td> <td>-32.01</td> <td>-43.12</td> <td>-48.32</td> </tr> <tr> <td>EPS</td> <td>-2.48</td> <td>-2.85</td> <td>-2.46</td> </tr> </tbody> </table> | Period end | 2/31/2017 | 12/31/2018 | 12/31/2019 | Revenue | 0.000 | 0.000 | 0.000 | Gross Profit | 0.000 | 0.000 | 0.000 | Gross Margin | 0.0% | 0.0% | 0.0% | Operating Profit | (32.82) | (43.51) | (49.64) | Operating Margin | | | | Net Income | -32.01 | -43.12 | -48.32 | EPS | -2.48 | -2.85 | -2.46 | <p>VALUATION RATIOS</p> <table border="1"> <thead> <tr> <th></th> <th>12/31/2018</th> </tr> </thead> <tbody> <tr> <td>EV/Sales</td> <td></td> </tr> <tr> <td>EV/EBITDA</td> <td>-0.73 x</td> </tr> <tr> <td>P/E</td> <td>-1.69 x</td> </tr> <tr> <td>P/B</td> <td></td> </tr> <tr> <td>FCF Yield</td> <td></td> </tr> </tbody> </table> | | 12/31/2018 | EV/Sales | | EV/EBITDA | -0.73 x | P/E | -1.69 x | P/B | | FCF Yield | | <p>STOCK PRICE PERFORMANCE*</p> <table border="1"> <thead> <tr> <th></th> <th>*As of 11/21/2018</th> </tr> </thead> <tbody> <tr> <td>Last price</td> <td>5.03</td> </tr> <tr> <td>52 Week High</td> <td>15.13</td> </tr> <tr> <td>52 Week Low</td> <td>4.78</td> </tr> <tr> <td>YTD Change</td> <td>-61.1%</td> </tr> <tr> <td>1 Year Change</td> <td>-65.4%</td> </tr> <tr> <td>5 Year Change</td> <td>-68.9%</td> </tr> <tr> <td>10 Year Change</td> <td>-68.9%</td> </tr> </tbody> </table> | | *As of 11/21/2018 | Last price | 5.03 | 52 Week High | 15.13 | 52 Week Low | 4.78 | YTD Change | -61.1% | 1 Year Change | -65.4% | 5 Year Change | -68.9% | 10 Year Change | -68.9% |
| Period end | 2/31/2017 | 12/31/2018 | 12/31/2019 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Revenue | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross Profit | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross Margin | 0.0% | 0.0% | 0.0% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating Profit | (32.82) | (43.51) | (49.64) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating Margin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net Income | -32.01 | -43.12 | -48.32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EPS | -2.48 | -2.85 | -2.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 12/31/2018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EV/Sales | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EV/EBITDA | -0.73 x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P/E | -1.69 x | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P/B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FCF Yield | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | *As of 11/21/2018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Last price | 5.03 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 52 Week High | 15.13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 52 Week Low | 4.78 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| YTD Change | -61.1% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 Year Change | -65.4% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 Year Change | -68.9% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 Year Change | -68.9% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Zynerba Pharmaceuticals, Inc. (ZYNE) Probability Sentiment

Disclaimer

Please be advised that GeolInvesting™ is strictly a research and publishing firm, of general and regular circulation, which falls within the publisher's exemption to the definition of an "investment advisor" under Section 202(a)(11)(A) – (E) of the Securities Act (15 U.S.C. 77d(a)(6) (the "Securities Act"). GeolInvesting™ is not registered as an investment advisor under the Securities Act or under any state laws. None of our trading or investing information, including the Content, GeolInvesting™ Email, Executive Casts and/or content or communication (collectively, "Information") provides individualized trading or investment advice and should not be construed as such.

Accordingly, please do not attempt to contact GeolInvesting™, or SanaCurrents™, its members, partners, affiliates, employees, consultants and/or hedge funds managed by partners of GeolInvesting™ (collectively, the "GeolInvesting™ Parties") to request personalized investment advice, which they cannot provide. The Information does not reflect the views or opinions of any other publication or newsletter.

We publish Information regarding certain stocks, options, futures, bonds, derivatives, commodities, currencies and/or other securities (collectively, "Securities") that we believe may interest our Users. The Information is provided for information purposes only, and GeolInvesting™ is not engaged in rendering investment advice or providing investment-related recommendations, nor does GeolInvesting™ solicit the purchase of or sale of, or offer any, Securities featured by and/or through the GeolInvesting™ Offerings and nothing we do and no element of the GeolInvesting™ Offerings should be construed as such. Without limiting the foregoing, the Information is not intended to be construed as a recommendation to buy, hold or sell any specific Securities, or otherwise invest in any specific Securities. Trading in Securities involves risk and volatility. Past results are not necessarily indicative of future performance.

The Information represents an expression of our opinions, which we have based upon generally available information, field research, inferences and deductions through our due diligence and analytical processes. Due to the fact that opinions and market conditions change over time, opinions made available by and through the GeolInvesting™ Offerings may differ from time-to-time, and varying opinions may also be included in the GeolInvesting™ Offerings simultaneously. To the best of our ability and belief, all Information is accurate and reliable, and has been obtained from public sources that we believe to be accurate and reliable, and who are not insiders or connected persons of the applicable Securities covered or who may otherwise owe any fiduciary duty or duty of confidentiality to the issuer. However, such Information is presented on an "as is," "as available" basis, without warranty of any kind, whether express or implied. GeolInvesting™ makes no representation, express or implied, as to the accuracy, timeliness or completeness of any such Information or with regard to the results to be obtained from its use. All expressions of opinion are subject to change without notice, and GeolInvesting™ does not undertake to update or supplement any of the Information.

The Information may include, or may be based upon, "Forward-Looking" statements as defined in the Securities Litigation Reform Act of 1995. Forward-Looking statements may convey our expectations or forecasts of future events, and you can identify such statements: (a) because they do not strictly relate to historical or current facts; (b) because they use such words such as "anticipate," "estimate," "expect(s)," "project," "intend," "plan," "believe," "may," "will," "should," "anticipates" or the negative thereof or other similar terms; or (c) because of language used in discussions, broadcasts or trade ideas that involve risks and uncertainties, in connection with a description of potential earnings or financial performance. There exists a variety of risks/uncertainties that may cause actual results to differ from the Forward-Looking statements. We do not assume any obligation to update any Forward-Looking statements whether as a result of new information, future events or otherwise, and such statements are current only as of the date they are made.

You acknowledge and agree that use of GeolInvesting's™ Information is at your own risk. In no event will GeolInvesting™ or any affiliated party be liable for any direct or indirect trading losses caused by any Information featured by and through the GeolInvesting™ Offerings. You agree to do your own research and due diligence before making any investment decision with respect to Securities featured by and through the GeolInvesting™ Offerings. You represent to GeolInvesting™ that you have sufficient investment sophistication to critically assess the Information. If you choose to engage in trading or investing that you do not fully understand, we may not advise you regarding the applicable trade or investment. We also may not directly discuss personal trading or investing ideas with you. The Information made available by and through the GeolInvesting™ Offerings is not a substitute for professional financial advice. You should always check with your professional financial, legal and tax advisors to be sure that any Securities, investments, advice, products and/or services featured by and through the GeolInvesting™ Offerings, as well as any associated risks, are appropriate for you.