Cassava Sciences (NASDAQ:SAVA)

March 6, 2020

SUMMARY

After clinical disappointments from Alzheimer's disease drugs that targeted the breakup of beta amyloid plaque, researchers turned their attention to tau, a brain-specific, axon-enriched protein. Beta amyloid plaque and tau appear to work together with distinct functions: Beta amyloid helps form the glue that holds plaque together after neurofibrillary tangles emerge from toxic tau. Beta amyloid can be described as the trigger, tau the bullet. The two proteins, however, seem to operate synergistically in a continuous feedback loop.

Several companies have advanced monoclonal antibodies into the clinic seeking to reduce the level of pTau as Alzheimer's treatments. Cassava Sciences is developing PTI-125 as a small molecule that restores the normal shape and function of filamin A (FLNA) in the brain. *SanaCurrents* assigns a **low pivotal sentiment** that Cassava will report positive topline results from its phase IIb trial of PTI-125 by mid-year 2020. Full results are expected by the fourth quarter.

Cassava's research on FLNA began 10 years ago with NIH funding. Cassava researchers assert when FLNA, a scaffolding protein, becomes altered, the normal function of neurons is disrupted. By correcting the FLNA protein, PTI-125 improves the function of certain brain receptors, consequently slowing neurodegeneration and exerting strong anti-neuroinflammatory effects.

In a 13-patient, open label phase IIa trial, Cassava reported significant reductions ($p<0.01$) in both nitrated and phosphorylated forms of the tau protein; **each patient exhibited biomarker responses** to PTI-125. The results, presented in December 2019, sent Cassava's stock up more than 4-fold in just three weeks.

Cassava has enrolled 64 patients in the phase IIb trial. Unlike the previous trial, the phase IIb will be a randomized, double blind, placebo-controlled, trial in US patients with mild-to-moderate Alzheimer's disease. Patients will receive placebo, 50 mg or 100 mg of PTI-125 twice daily over 28 days. The trial objective is to investigate the safety and effects of PTI-125 on biomarkers of disease. The primary endpoint is improvement in patients' biomarkers of disease from baseline to Day 28.

THE EDGE

Cassava's stock shot up in December because PTI-125 demonstrated through biomarker measurement it potentially could pinpoint an Alzheimer's diagnosis through blood and serum tests.

While disabling the trigger function of beta amyloid plaque was regarded as the Holy Grail in treating Alzheimer's – as well as a mega-blockbuster – the drugs simply did not work. One reason often cited for the failures was the drugs had few *specific* targets. The Cassava approach is much more granular. In the phase IIa trial, PTI-125 produced declines in four types of tau: p-tau-T181, p-tau-T202, p-tau-T231, and a nitrated form of tau—n-tau-Y29. Cassava contends these cumulative declines can influence amyloid beta production, as well as both neuroinflammation and tau pathology.

PROBABILITY SENTIMENT

- ☐ SUPERIOR (highest)
- ☑ Pivotal
- ☐ Advantageous

Key Catalyst(s)

- Topline results from phase IIb trial of Alzheimer's drug PTI-125

Key Catalyst Date(s)

- mid-year 2020

Insider & Institutional Holdings

20.19% % of Shares Held by All Insider

39.17% % of Shares Held by Institutions

49.08% % of Float Held by Institutions

36 Number of Institutions Holding Shares

Key Executives

Mr. Remi Barbier, Founder, Chairman, CEO & Pres

Dr. Nadav Friedmann, COO, Chief Medical Officer & Director

Dr. George Thornton, Sr. VP of Technology

Mr. Michael Zamloot, Sr. VP of Technical Operations

Dr. Michael Marsman Pharm.D., Sr. VP of Regulatory Affairs

Location

7801 North Capital of Texas Highway
Suite 260
Austin, TX 78731
512-501-2444
http://www.cassavasciences.com

General Guidelines for SanaCurrents Strategy

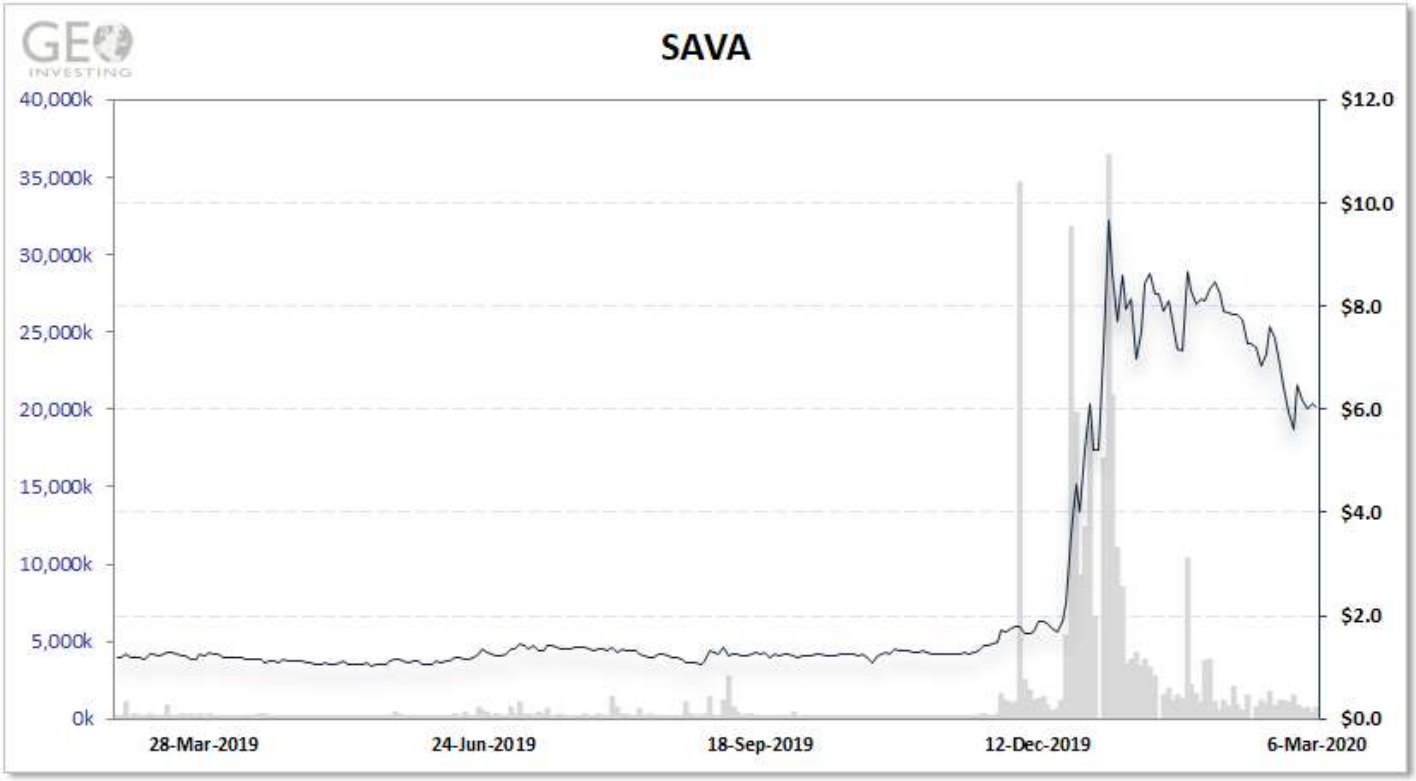
Based on SanaCurrents' analytical model, Superior and Pivotal sentiments reflect a probability score of at least 60% that the company will announce a positive result to the specified catalyst. In our experience, a positive result typically increases the company's share price. An Advantageous sentiment reflects a score of less than 60%.

THE EDGE cont'd

Another edge for Cassava's phase IIb trial is the endpoint of improvement in patients' biomarkers. Patients' cognition and aptitude will not be assessed broadly. Rather, only the reduction in biomarkers at the two scheduled doses compared to placebo will be assessed. This endpoint, combined with the phase IIa results, point to Cassava repeating its earlier success.

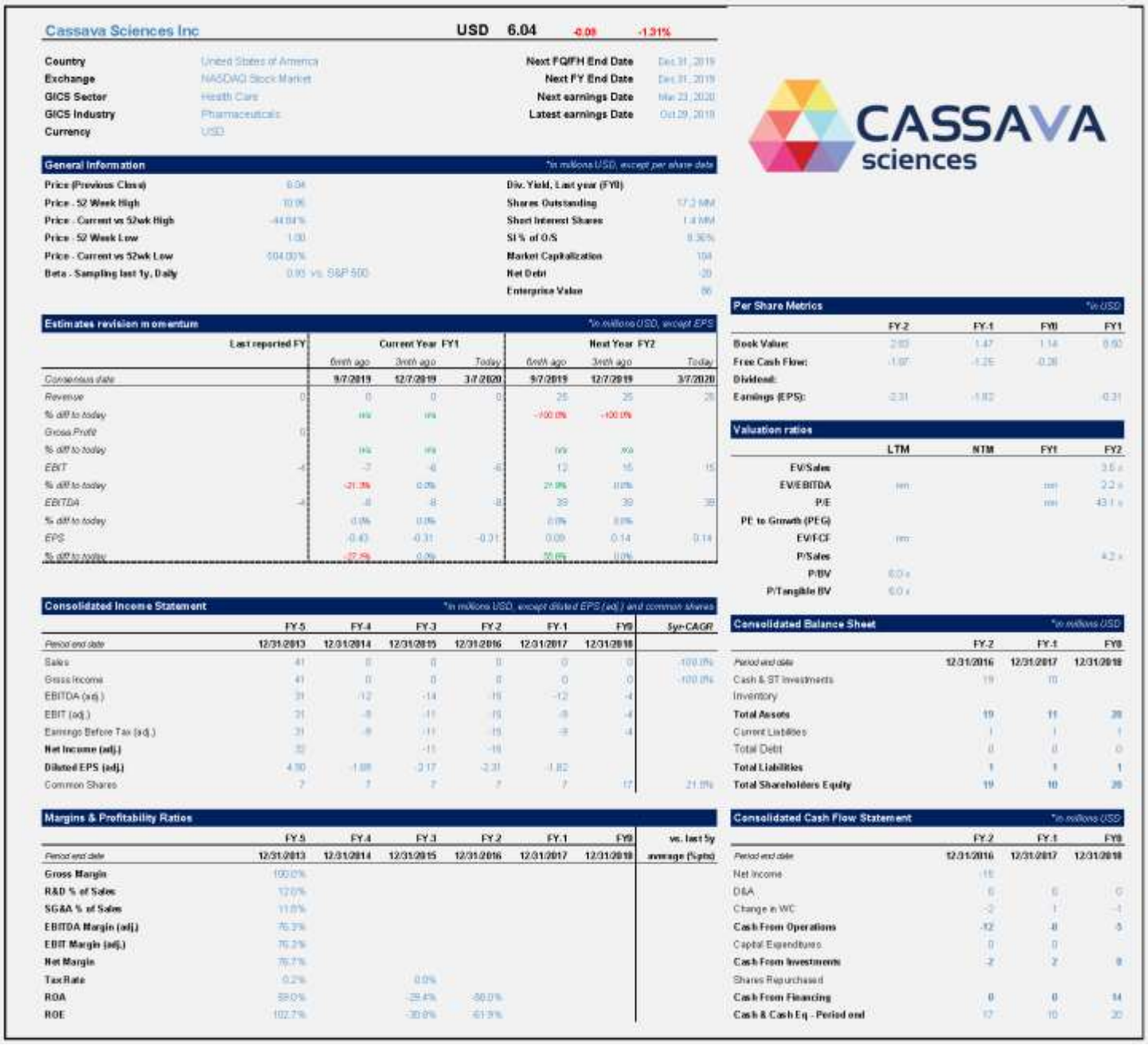
Cassava has a long path ahead to demonstrate if PTI-125 can be the mega-blockbuster expected of the first approved Alzheimer's drug. The company, however, has a near-term plan to elevate its clinical standing and valuation.

Cassava is developing a diagnostic test called PTI-125Dx to detect Alzheimer's disease using only a blood sample. Such a comprehensive diagnostic does not exist now. Positive results from the phase IIb trial would validate, and likely accelerate, the PTI-125Dx test, pushing the company's market cap well past its current level of $105 million.



Cassava Sciences (NASDAQ:SAVA)

Advanced Tearsheet



Cassava Sciences Inc — USD 6.04 -0.09 -1.31%

Country	United States of America	Next FQ/FH End Date	Dec 31, 2019
Exchange	NASDAQ Stock Market	Next FY End Date	Dec 31, 2019
GICS Sector	Health Care	Next earnings Date	Mar 23, 2020
GICS Industry	Pharmaceuticals	Latest earnings Date	Oct 29, 2019
Currency	USD		

CASSAVA sciences

General Information *in millions USD, except per share data

Price (Previous Close)	6.04	Div. Yield, Last year (FY0)	
Price - 52 Week High	10.06	Shares Outstanding	17.2 MM
Price - Current vs 52wk High	-44.04%	Short Interest Shares	1.4 MM
Price - 52 Week Low	1.00	SI % of O/S	8.36%
Price - Current vs 52wk Low	504.00%	Market Capitalization	104
Beta - Sampling last 1y, Daily	0.95 vs. S&P 500	Net Debt	-20
		Enterprise Value	84

Estimates revision momentum *in millions USD, except EPS

	Last reported FY	Current Year FY1			Next Year FY2		
		6mth ago	3mth ago	Today	6mth ago	3mth ago	Today
Consensus date		9/7/2019	12/7/2019	3/7/2020	9/7/2019	12/7/2019	3/7/2020
Revenue	0	0	0	0	25	25	25
% diff to today		n/a	n/a		-100.0%	-100.0%	
Gross Profit	0						
% diff to today		n/a	n/a		n/a	n/a	
EBIT	-6	-7	-8	-8	12	16	15
% diff to today		-21.3%	0.0%		21.9%	0.0%	
EBITDA	-6	-8	-8	-8	39	39	39
% diff to today		0.0%	0.0%		0.0%	0.0%	
EPS		-0.43	-0.31	-0.31	0.09	0.14	0.14
% diff to today		-27.9%	0.0%		55.6%	0.0%	

Per Share Metrics *in USD

	FY-2	FY-1	FY0	FY1
Book Value:	2.83	1.47	1.14	0.92
Free Cash Flow:	-1.97	-1.25	-0.38	
Dividend:				
Earnings (EPS):	-2.31	-1.82		0.31

Valuation ratios

	LTM	NTM	FY1	FY2
EV/Sales				3.6 x
EV/EBITDA	nm		nm	2.2 x
P/E			nm	43.1 x
PE to Growth (PEG)				
EV/FCF	nm			
P/Sales				4.2 x
P/BV	6.0 x			
P/Tangible BV	6.0 x			

Consolidated Income Statement *in millions USD, except diluted EPS (adj.) and common shares

	FY-5	FY-4	FY-3	FY-2	FY-1	FY0	5yr-CAGR
Period end date	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	
Sales	41	0	0	0	0	0	-100.0%
Gross Income	41	0	0	0	0	0	-100.0%
EBITDA (adj.)	31	-12	-14	-15	-12	-8	
EBIT (adj.)	31	-8	-11	-15	-9	-8	
Earnings Before Tax (adj.)	31	-8	-11	-15	-9	-8	
Net Income (adj.)	32		-11	-15			
Diluted EPS (adj.)	4.50	-1.08	-2.17	-2.31	-1.82		
Common Shares	7	7	7	7	7	17	21.0%

Consolidated Balance Sheet *in millions USD

	FY-2	FY-1	FY0
Period end date	12/31/2016	12/31/2017	12/31/2018
Cash & ST Investments	19	10	
Inventory			
Total Assets	19	11	20
Current Liabilities	1	1	1
Total Debt	0	0	0
Total Liabilities	1	1	1
Total Shareholders Equity	19	10	20

Margins & Profitability Ratios

	FY-5	FY-4	FY-3	FY-2	FY-1	FY0	vs. last 5y
Period end date	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	average (%-pts)
Gross Margin	100.0%						
R&D % of Sales	12.0%						
SG&A % of Sales	11.8%						
EBITDA Margin (adj.)	76.3%						
EBIT Margin (adj.)	76.3%						
Net Margin	76.7%						
Tax Rate	0.2%		0.0%				
ROA	59.0%		-29.4%	-58.0%			
ROE	102.7%		-30.0%	-61.9%			

Consolidated Cash Flow Statement *in millions USD

	FY-2	FY-1	FY0
Period end date	12/31/2016	12/31/2017	12/31/2018
Net Income	-15		
D&A	0	0	0
Change in WC	-2	1	-1
Cash From Operations	-12	-8	-5
Capital Expenditures	0	0	
Cash From Investments	-2	2	0
Shares Repurchased			
Cash From Financing	0	0	14
Cash & Cash Eq - Period end	17	10	20

Disclosure of General Guidelines for SanaCurrents Strategy

In most situations, SanaCurrents partners take a position in a stock (or buy shares) shortly after a report on a catalyst is published. This is particularly true if the catalyst is within 90 days of the published report. For catalysts with horizons of 6-9 months, or longer, SanaCurrents anticipates the biopharma and device stocks from which it selects catalysts can rise or fall 20-30% in the months following the date of the published report. While buying at a dip, naturally, is preferred, SanaCurrents does not forecast or model in swings in share price prior to the catalyst. SanaCurrents' analytics score models the probability a compelling catalyst will be positive. SanaCurrents expects a positive announcement regarding a catalyst will drive a company's stock to higher level than the price on the date of the report, based on the company's value and capital structure when the report was published. That said, subscribers should exercise their preferred, individual discipline when timing trades, buy or sell, regarding the catalyst forecast.

Disclaimer

Please be advised that GeoInvesting™ 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"). GeoInvesting™ 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, GeoInvesting™ 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 GeoInvesting™, or SanaCurrents™, its members, partners, affiliates, employees, consultants and/or hedge funds managed by partners of GeoInvesting™ (collectively, the "GeoInvesting™ 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 GeoInvesting™ is not engaged in rendering investment advice or providing investment-related recommendations, nor does GeoInvesting™ solicit the purchase of or sale of, or offer any, Securities featured by and/or through the GeoInvesting™ Offerings and nothing we do and no element of the GeoInvesting™ 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 GeoInvesting™ Offerings may differ from time-to-time, and varying opinions may also be included in the GeoInvesting™ 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. GeoInvesting™ 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 GeoInvesting™ 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 GeoInvesting's™ Information is at your own risk. In no event will GeoInvesting™ or any affiliated party be liable for any direct or indirect trading losses caused by any Information featured by and through the GeoInvesting™ 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 GeoInvesting™ Offerings. You represent to GeoInvesting™ 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 GeoInvesting™ 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 GeoInvesting™ Offerings, as well as any associated risks, are appropriate for you.