

Avivagen, Inc.

(OTCQB: VIVXF)

VIVXF: Record Revenue for 3QFY21!

Using an EV/EBITDA multiple of 16 applied to 2024 revenues and a discount rate of 20% (derived from CAPM), VIVXF is valued at \$2.20/share. This model is highly dependent upon commercial success of OxC-beta™ Livestock and will be adjusted accordingly based on future commercial results.

Current Price (09/08/20) \$0.35
Valuation \$2.20

OUTLOOK

On September 3, 2020, Avivagen, Inc. (VIVXF) announced financial results for the third quarter of fiscal year 2020 that ended July 31, 2020. The company reported revenues of CAD\$612,530, an increase of CAD\$600,046 compared to the third quarter of fiscal year 2019, which was driven by two major sales of OxC-beta™ during the quarter and the largest-ever orders from Mexico-based Industrias Melder and Philippines-based UNAHCO. In addition, during the quarter regulatory approval was secured in Brazil, which has led to the company's first order of OxC-beta in what is the third largest feed market in the world.

SUMMARY DATA

52-Week High \$0.56
52-Week Low \$0.29
One-Year Return (%) N/A
beta N/A
Average Daily Volume (sh) 1,763

Shares Outstanding (mil) 42
Market Capitalization (\$mil) \$15
Short Interest Ratio (days) 1
Institutional Ownership (%) 0
Insider Ownership (%) N/A

Annual Cash Dividend \$0.00
Dividend Yield (%) 0.00

5-Yr. Historical Growth Rates
Sales (%) N/A
Earnings Per Share (%) N/A
Dividend (%) N/A

P/E using TTM EPS N/A
P/E using 2019 Estimate N/A
P/E using 2020 Estimate N/A

Risk Level High
Type of Stock Small-Growth
Industry Med Products

ZACKS ESTIMATES

Revenue

(in millions of CAD\$)

	Q1 (Jan)	Q2 (Apr)	Q3 (Jul)	Q4 (Oct)	Year (Oct)
2019	0.3 A	0.3 A	0.0 A	0.3 A	1.0 A
2020	0.2 A	0.0 A	0.6 A	0.3 E	0.9 E
2021					3.0 E
2022					5.0 E

Earnings per Share

(in CAD\$)

	Q1 (Jan)	Q2 (Apr)	Q3 (Jul)	Q4 (Oct)	Year (Oct)
2019	-\$0.03 A	-\$0.04 A	-\$0.04 A	-\$0.03 A	-\$0.14 A
2020	-\$0.04 A	-\$0.03 A	-\$0.02 A	-\$0.03 E	-\$0.09 E
2021					-\$0.12 E
2022					-\$0.10 E

WHAT'S NEW

Financial Update

Record Revenue for 3QFY20!

On September 3, 2020, Avivagen, Inc. (VIVXF) [announced](#) financial results for the third quarter of fiscal year 2020 that ended July 31, 2020. Revenue for the three months ending July 31, 2020 was CAD\$612,530 compared to CAD\$12,484 for the three months ending July 31, 2019. The increase was primarily driven by increased sales of OxC-beta Technology product in Mexico and the Philippines. Operating expenses were approximately CAD\$1.0 million for the third quarter of fiscal year 2020 compared to CAD\$1.3 million for the third quarter of fiscal year 2019. The decrease was primarily due to the recognition of COVID-related government grants during the most recent quarter.

As of July 31, 2020, Avivagen had approximately CAD\$1.2 million in cash and cash equivalents. We estimate the company has sufficient capital to fund operations into the first quarter of fiscal year 2021. As of July 31, 2020, Avivagen had approximately 41.7 million shares outstanding and, when considering the approximately 8.7 million warrants and 2.8 million stock options, a fully diluted share count of approximately 53.2 million.

Business Update

New Publication on Effectiveness of OxC-beta Technology on Sow Health

On August 18, 2020, Avivagen [announced](#) the publication of a manuscript in the British Journal of Nutrition on the health effects of oxidized β -carotene on the reproductive performance and immune response of sows and nursing piglets ([Chen et al., 2020](#)). The article, titled "The effects of maternal supplementation with fully oxidised β -carotene on the reproductive performance and immune response of sows, as well as the growth performance of nursing piglets", showed a statistically significant increase in antibody levels in colostrum in sows fed oxidized β -carotene, which led to healthier and heavier litters compared to controls. The overall health of the sows fed oxidized β -carotene was apparent from reduced weight loss during lactation, a higher percentage of sows returning to estrus earlier, and fewer undersized piglets at birth.

The company continues to publish positive results in peer-reviewed journals that helps to validate the OxC-beta technology, with many feed industry leaders looking for that type of validation before deciding to utilize a new product such as OxC-beta.

Approval and First Sale in Brazil

On June 24, 2020, Avivagen [announced](#) that it has received approval from The Ministry of Agriculture-Feed Additives Division for the immediate use of OxC-beta Livestock in poultry, swine, and cattle in Brazil. On August 12, 2020, the company [announced](#) the first sale of OxC-beta Livestock in Brazil to Look Chemicals, Avivagen's distribution partner in Brazil. The 125 kg purchase represents an "introductory order" as Look Chemicals begins to distribute the product in the market.

Brazil is the third largest feed market in the world, consuming more than 69 million metric tons of livestock feed each year. Importantly, Brazil is a large exporter to regions such as Europe that have banned the use of antibiotics in livestock feed. OxC-Beta is now approved in nine markets worldwide, including the U.S., Mexico, New Zealand, Australia, Taiwan, Thailand, Malaysia, and the Philippines.

Preparing for OxC-beta™ Approval in China

In Dec. 2019, Avivagen [announced](#) it has entered into an agreement with COFCO Biotechnology Co. Ltd. in which COFCO will assist Avivagen in securing regulatory approval for OxC-beta™ Livestock in China. COFCO is a leading supplier of agriculture products in China, and with 12,000 employees and sales of more

than \$17.5 billion in 2018 we believe they are a great partner to assist Avivagen in determining what trials of OxC-beta™ Livestock will be necessary to secure approval for use in chicken feed along with advising on other aspects of the Chinese regulatory pathway.

China represents a tremendous opportunity for Avivagen as the Chinese government has announced a plan to ban all antibiotics in livestock feed by July 2020. In addition, African Swine Fever (ASF) decimated China's swine herd in 2019, with an increase in poultry production set to fill the protein supply gap. This increased demand for poultry is being filled by both increased imports to China as well as increased domestic poultry production, which is up 20% since 2018. Some estimates call for Chinese poultry feed production to nearly double over the next five years ([Feed Strategy](#)).

Accelerating Plans for Commercial Launch of OxC-beta Technology for Human Use

In March 2020, Avivagen [announced](#) plans to accelerate its plans for commercial launch of OxC-beta as a supplement for human use as a response to the COVID-19 pandemic. Multiple studies show that the OxC-beta product supports and primes the innate immune system while decreasing exaggerated inflammatory responses. We anticipate additional updates from the company on the timeline of the launch of the product in the U.S. and other markets.

Valuation

We value Avivagen using an EV/EBITDA multiple based on projected revenues of OxC-beta Livestock. We believe Avivagen is laying the groundwork for a very steep growth rate in revenues in the coming years through a combination of new market opportunities and market expansion. For example, the company is making steady progress on sales in the Philippines and we believe it is only a matter of time before sales begin to ramp up considerably in Asia and other parts of the world, particularly as additional data showing the benefits of the OxBC technology is published.

Due to the fact that Avivagen has a limited commercial history, the financial forecasts we have prepared are educated guesses and are heavily reliant on the company continuing to execute on its business plan to get OxC-beta Livestock approved in as many jurisdictions as possible, signing distribution agreements in each of those jurisdictions, and continuing market expansion through adoption of OxC-beta Livestock by major animal producers.

Our model estimates sales of OxC-beta Livestock of CAD\$60 million in 2025, as we believe the company will hit an inflection point following the adoption of OxC-beta Livestock by multiple major animal producers over the next couple of years. Using an EV/EBITDA ratio of 16 (which is derived from the average for pharmaceutical companies found [here](#)) and an EBITDA of CAD\$23 million leads to an EV of CAD\$368 million. Using a discount rate of 20% (derived from CAPM) we arrive at a present day EV of approximately CAD\$148 million. The company has approximately CAD\$3.5 million in debt, approximately CAD\$1.2 million in cash, and CAD\$7.8 million in potential financing from warrant exercises. Accounting for that leads to an NPV of CAD\$153 million. Dividing this by the fully diluted share count of 53.2 million leads to a valuation of approximately CAD\$2.89 per share. Using the current exchange ratio of \$1 CAD = \$0.76 USD leads to a valuation for VIVXF of approximately \$2.20.

PROJECTED FINANCIALS

Avivagen, Inc. (in Canadian Dollars)	FY2019 A	1QFY20 A	2QFY20 A	3QFY20 A	4QFY20 E	FY2020 E	FY2021 E	FY2022 E
OxC-beta™ Livestock	\$1.0	\$0.2	\$0.0	\$0.6	\$0.3	\$1.2	\$3.0	\$5.0
Other Income	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Revenues	\$1.0	\$0.2	\$0.0	\$0.6	\$0.3	\$1.2	\$3.0	\$5.0
Cost of Sales	\$0.5	\$0.1	\$0.0	\$0.4	\$0.1	\$0.7	\$1.8	\$2.7
<i>Product Gross Margin</i>	54%	41%	50%	40%	53%	44%	40%	46%
Selling, General and Administration	\$3.8	\$0.9	\$0.9	\$0.5	\$1.0	\$3.4	\$5.0	\$5.5
Research	\$0.6	\$0.2	\$0.1	\$0.2	\$0.2	\$0.7	\$0.7	\$0.8
Depreciation of Equipment	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Depreciation of right-of-use assets	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1
Finance Cost	\$0.9	\$0.3	\$0.3	\$0.3	\$0.3	\$1.2	\$1.2	\$1.2
Joint Venture Termination	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Investment Loss in Associate	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Other (Income) Expense	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Operating Income	(\$4.8)	(\$1.3)	(\$1.4)	(\$0.8)	(\$1.4)	(\$4.9)	(\$5.8)	(\$5.3)
<i>Operating Margin</i>	-	-	-	-	-	-	-	-
Non-Operating Expenses (Net)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Pre-Tax Income	(\$4.8)	(\$1.3)	(\$1.4)	(\$0.8)	(\$1.4)	(\$4.9)	(\$5.8)	(\$5.3)
Income Taxes	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0	\$0	\$0
<i>Tax Rate</i>	0%	0%	0%	0%	0%	0%	0%	0%
Net Income	(\$4.8)	(\$1.3)	(\$1.4)	(\$0.8)	(\$1.4)	(\$4.9)	(\$5.8)	(\$5.3)
<i>Net Margin</i>	-	-	-	-	-	-	-	-
Reported EPS	(\$0.14)	(\$0.04)	(\$0.03)	(\$0.02)	(\$0.03)	(\$0.12)	(\$0.12)	(\$0.10)
<i>YOY Growth</i>	-	-	-	-	-	-	-	-
Basic Shares Outstanding	34.4	36.3	41.5	41.7	45.0	41.1	50.0	55.0

Source: Zacks Investment Research, Inc.

David Bautz, PhD

HISTORICAL STOCK PRICE



Source: Zacks SCR

DISCLOSURES

The following disclosures relate to relationships between Zacks Small-Cap Research ("Zacks SCR"), a division of Zacks Investment Research ("ZIR"), and the issuers covered by the Zacks SCR Analysts in the Small-Cap Universe.

ANALYST DISCLOSURES

I, David Bautz, PhD, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report. I believe the information used for the creation of this report has been obtained from sources I considered to be reliable, but I can neither guarantee nor represent the completeness or accuracy of the information herewith. Such information and the opinions expressed are subject to change without notice.

INVESTMENT BANKING AND FEES FOR SERVICES

Zacks SCR does not provide investment banking services nor has it received compensation for investment banking services from the issuers of the securities covered in this report or article.

Zacks SCR has received compensation from the issuer directly, from an investment manager, or from an investor relations consulting firm engaged by the issuer for providing non-investment banking services to this issuer and expects to receive additional compensation for such non-investment banking services provided to this issuer. The non-investment banking services provided to the issuer includes the preparation of this report, investor relations services, investment software, financial database analysis, organization of non-deal road shows, and attendance fees for conferences sponsored or co-sponsored by Zacks SCR. The fees for these services vary on a per-client basis and are subject to the number and types of services contracted. Fees typically range between ten thousand and fifty thousand dollars per annum. Details of fees paid by this issuer are available upon request.

POLICY DISCLOSURES

This report provides an objective valuation of the issuer today and expected valuations of the issuer at various future dates based on applying standard investment valuation methodologies to the revenue and EPS forecasts made by the SCR Analyst of the issuer's business. SCR Analysts are restricted from holding or trading securities in the issuers that they cover. ZIR and Zacks SCR do not make a market in any security followed by SCR nor do they act as dealers in these securities. Each Zacks SCR Analyst has full discretion over the valuation of the issuer included in this report based on his or her own due diligence. SCR Analysts are paid based on the number of companies they cover. SCR Analyst compensation is not, was not, nor will be, directly or indirectly, related to the specific valuations or views expressed in any report or article.

ADDITIONAL INFORMATION

Additional information is available upon request. Zacks SCR reports and articles are based on data obtained from sources that it believes to be reliable, but are not guaranteed to be accurate nor do they purport to be complete. Because of individual financial or investment objectives and/or financial circumstances, this report or article should not be construed as advice designed to meet the particular investment needs of any investor. Investing involves risk. Any opinions expressed by Zacks SCR Analysts are subject to change without notice. Reports or articles or tweets are not to be construed as an offer or solicitation of an offer to buy or sell the securities herein mentioned.

CANADIAN COVERAGE

This research report is a product of Zacks SCR and prepared by a research analyst who is employed by or is a consultant to Zacks SCR. The research analyst preparing the research report is resident outside of Canada, and is not an associated person of any Canadian registered adviser and/or dealer. Therefore, the analyst is not subject to supervision by a Canadian registered adviser and/or dealer, and is not required to satisfy the regulatory licensing requirements of any Canadian provincial securities regulators, the Investment Industry Regulatory Organization of Canada and is not required to otherwise comply with Canadian rules or regulations.