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# Avivagen, Inc.

VIVXF: OxC-beta Approved in Vietnam...

Using an EV/EBITDA multiple of 16 applied to 2026 estimated revenues and a discount rate of 15% (derived from CAPM), VIVXF is valued at \$1.25/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 (05/09/22) \$0.18 **Valuation** \$1.25

# OUTLOOK

(OTCQB: VIVXF)

On March 30, 2022, Avivagen, Inc. (VIVXF) announced financial results for the first quarter of fiscal year 2022 that ended January 31, 2022. In February 2022, Avivagen announced that OxC-beta was approved for use in Vietnam, which is the largest feed market in Southeast Asia. Total feed consumption in Vietnam was 32 MMT in 2020 and is expected to grow to 35 MMT within the next few years. The company recently secured an order from an industry-leading poultry producer in Mexico. While the initial order is modest, the customer's potential capacity could lead to the use of a considerable quantity of OxC-beta.

# **SUMMARY DATA**

52-Week High 52-Week Low One-Year Return (%) beta	\$0.46 \$0.15 -59.43 0.21	Risk Level Type of Stock Industry				Above Avg. Small-Growth Med Products		
Average Daily Volume (sh)	3,004	ZACKS ESTIMATES						
Shares Outstanding (mil) Market Capitalization (\$mil)	57 \$10	Revenu (in millions		Q2	Q3	Q4	Year	
Short Interest Ratio (days)	1		(Jan)	(Apr)	(Jul)	(Oct)	(Oct)	
Institutional Ownership (%) Insider Ownership (%)	0 N/A	2021 2022	0.3 A 0.3 A	0.2 A 0.3 E	0.5 A 0.7 E	0.4 A 0.8 E	1.3 A 2.0 E	
Annual Cash Dividend Dividend Yield (%)	\$0.00 0.00	2023 2024					5.0 E 10.0 E	
5-Yr. Historical Growth Rates Sales (%)	N/A	Earnings per Share (in CAD\$)						
Earnings Per Share (%) Dividend (%)	N/A N/A	2021	<b>Q1</b> (Jan) -\$0.03 A		Q3 (Jul) -\$0.03 A	<b>Q4</b> (Oct) -\$0.03 A	Year (Oct) -\$0.12 A	
P/E using TTM EPS P/E using 2019 Estimate P/E using 2020 Estimate	N/A N/A N/A	2022 2023 2024	-\$0.03 A	-\$0.03 E	-\$0.02 E	-\$0.02 E	-\$0.09 E -\$0.06 E -\$0.03 E	

### WHAT'S NEW

## **Business Update**

OxC-beta Approved in Vietnam; Looking for Sales Ramp in 2H22

Avivagen, Inc. (VIVXF) is developing products to support animal health, which includes replacing antibiotics in livestock feeds with proprietary compounds that promote the growth and overall health of the animal through support of the host's innate immune system. Avivagen discovered that  $\beta$ -carotene polymerizes with oxygen into a unique class of compounds (oxidized  $\beta$ -carotene, OxBC) that promote immunological health and are the basis of Avivagen's OxC-beta<sup>TM</sup> technology. Numerous studies conducted by Avivagen and its partners has shown that supplementation of feed with parts-per-million levels of OxC-beta Livestock can be used as a replacement for growth-promoting antibiotics while offering the same or better growth and health benefits without contributing to the development of antibiotic resistant organisms.

Following an economically difficult 2021, Avivagen believes that conditions are continuing to improve in 2022, which should be reflected in increased revenues in the second half of this year. Recent news items and those anticipated in the near future include:

- In February 2022, Avivagen <u>announced</u> that it received approval for OxC-beta in Vietnam. This is an important milestone for Avivagen since Vietnam is the largest feed market in Southeast Asia, along with being a key food supplier for China. Two positive research trials conducted under Vietnamese commercial conditions support the use of OxC-beta. Both trials showed clear benefits on improving the health and productivity of piglets when using Avivagen's product. The company is in active discussions with potential distribution partners and we anticipate an announcement on a partnership in the near future.
- In March 2022, Avivagen <u>announced</u> an order for OxC-beta Livestock from a large, influential and
  industry-leading poultry producer in Mexico. While modest in size, the order could represent the first of
  increasingly larger orders as the customer implements OxC-beta at its contract farms. Following a
  difficult year in Mexico that resulted in unfulfilled contracts due financial restructurings for its
  customers, Avivagen has re-engaged with a former customer to renegotiate a contract and is confident
  of a positive outcome.
- Avivagen previously applied for approval of OxC-beta in China and registration activity is currently
  ongoing. China represents a very large opportunity for Avivagen as the entire Asian market is in the
  process of reducing antibiotic use in food animals. While we are unsure when final approval will be
  given in China, we are hopeful that it will be completed in the near future.
- The company recently closed on a private placement of debentures and shares as well as a private placement of shares and warrants. In March 2022, Avivagen <u>secured</u> debentures for gross proceeds of approximately CAD\$5.678 million that bear interest at a rate of 9.0% per annum. Approximately CAD\$5.46 million of the proceeds were used to retire principal and interest outstanding related to existing debentures issued by Avivagen in March and April 2019. In April 2022, Avivagen <u>closed</u> the first tranche of a non-brokered private placement of up to CAD\$5.0 million. The company issued 8,315,000 units for gross proceeds of CAD\$1.663 million. Each unit consists of one share of common stock and one warrant with an exercise price of \$0.30 per share that will be exercisable for a period of five years.
- As a reminder, Avivagen signed a land-mark eight-year deal with AB Vista in October 2021 in which they will become the exclusive distributor of OxC-beta for use with poultry, swine, ruminants (dairy and beef), and aquaculture in the U.S., Brazil, and Thailand. The deal includes minimum sales guarantees that are "modest" in the first year but then ramp up in subsequent years. Trials are already

underway with many AB Vista customers and we anticipate the first sales from this partnership in 2022.

# **Financial Update**

On March 30, 2022, Avivagen <u>announced</u> financial results for the first quarter of fiscal year 2022 that ended January 31, 2022. Revenues for the first quarter of fiscal year 2022 were CAD\$271,157, compared to CAD\$261,987 for the first quarter of 2021. The slight increase was mainly due to sales in the Philippines partially offset by a reversal of revenues for product that was returned by a customer in Mexico.

Operating expenses for the first quarter of fiscal year 2022 were approximately CAD\$1.2 million compared to approximately CAD\$1.0 for the first quarter of fiscal year 2021. The increase was primarily due to impairment expenses recognized on inventories and equipment. Comprehensive loss for the first quarter of fiscal year 2022 was approximately CAD\$1.6 million compared to approximately CAD\$1.3 million for the first quarter of fiscal year 2021.

Avivagen exited the first quarter of fiscal year 2022 with approximately CAD\$0.8 million in cash and cash equivalents. As discussed previously, Avivagen closed on the first tranche of up to CAD\$5.0 million in financing and we anticipate the company closing on additional tranches in the near future. We estimate that as of the date of this report Avivagen had approximately 71.5 million shares outstanding and, when factoring in stock options and warrants, a fully diluted share count of 96.1 million.

## Conclusion

We expect Avivagen's revenues to begin to ramp up in the second half of 2022 as the world continues to emerge from the COVID-19 pandemic and world-wide supply chain disruptions. We look forward to continued updates from the company regarding additional commercial partnerships, regulatory approval in China, and trial results as the year progresses. After incorporating the recent closing of debentures and shares into our model, along with the current exchange rate between the Canadian and US dollar, our valuation has decreased to \$1.25 per share.

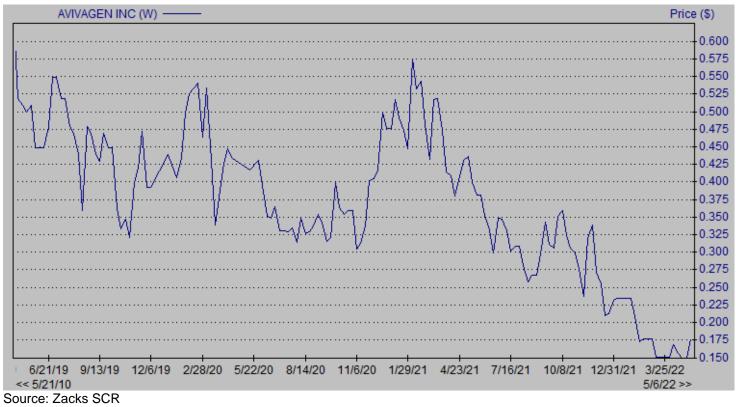
# **PROJECTED FINANCIALS**

Avivagen, Inc. (in Canadian Dollars)	FY2021 A	1QFY22 A	2QFY22 E	3QFY22 E	4QFY22 E	FY2022 E	FY2023 E	FY2024 E
OxC-beta™ Livestock	\$1.3	\$0.3	\$0.3	\$0.7	\$0.8	\$2.0	\$5.0	\$10.0
Other Income	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total Revenues</b>	\$1.3	\$0.3	\$0.3	\$0.7	\$0.8	\$2.0	\$5.0	\$10.0
Cost of Sales	\$0.8	\$0.1	\$0.3	\$0.3	\$0.3	\$1.0	\$3.0	\$6.0
Product Gross Margin	41%	46%	-20%	57%	63%	48%	40%	40%
Salaries, board fees, and benefits	\$1.6	\$0.4	\$0.4	\$0.4	\$0.4	\$1.6	\$2.0	\$2.0
Professional fees and other	\$2.7	\$0.8	\$0.7	\$0.8	\$0.9	\$3.2	\$3.2	\$3.3
Share-based payments	\$0.3	\$0.0	\$0.1	\$0.1	\$0.1	\$0.3	\$0.4	\$0.4
Joint Venture Termination	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Government grants	(\$0.2)	(\$0.0)	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.0
Depreciation of equipment	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1
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	(\$4.1)	(\$1.1)	(\$1.3)	(\$0.9)	(\$0.9)	(\$4.3)	(\$3.7)	(\$1.8)
Operating Margin	-	-	-	-	-	-	-	-
Finance cost, net	\$2.2	\$0.5	\$0.5	\$0.5	\$0.5	\$2.0	\$1.6	\$1.6
Pre-Tax Income	(\$6.4)	(\$1.6)	(\$1.8)	(\$1.4)	(\$1.4)	(\$6.2)	(\$5.3)	(\$3.4)
Income Taxes	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tax Rate	0%	0%	0%	0%	0%	0%	0%	0%
Net Income	(\$6.4)	(\$1.6)	(\$1.8)	(\$1.4)	(\$1.4)	(\$6.2)	(\$5.3)	(\$3.4)
Net Margin	-	-	_	-	-	-	-	-
Reported EPS	(\$0.12)	(\$0.03)	(\$0.03)	(\$0.02)	(\$0.02)	(\$0.09)	(\$0.06)	(\$0.03)
YOY Growth	-	-	-	-	<u> </u>	<u>-</u>	-	-
Basic Shares Outstanding	52.4	57.0	65.0	80.0	90.0	73.0	95.0	100.0

Source: Zacks Investment Research, Inc.

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