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Zacks Small-Cap Research

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Lisa Thompson
312-265-9154
lthompson@zacks.com

scr.zacks.com
10 S. Riverside Plaza, Chicago, IL 60606

POET Technologies Inc. (V.PTK – TSX-V)

POET Generates its First Revenues Since Selling off DenseLight as it Begins to Work with Customers

Given its unique product offering and large TAM we believe POET shares are worth CN$2.81 based on peer multiples given no further equity dilution than forecast.

Current Price (08/23/21)	CN$1.04
Valuation	**CN$2.81**

OUTLOOK

POET Technologies is a startup seeking to disrupt the photonics industry with a new design that eliminates parts of an optical transceiver and replaces them with a single integrated device which is smaller, cheaper and faster than the current solutions. It has a $50M joint venture with Sanan IC to make and sell optical engines to data centers and telecom. Its solution can be produced in a fab, eliminating costly manual steps, and allowing it to be easily produced in large quantities. We believe POET's platform can be applied to many other large photonics markets including high speed computing, co-packaged optics, augmented reality, LIDAR, and the Internet of Things.

SUMMARY DATA

52-Week High	**CN$1.58**
52-Week Low	**CN$0.46**
One-Year Return (%)	**112**
Beta	**0.7**
Average Daily Volume (sh)	**337,474**
Shares Outstanding (mil)	**351**
Market Capitalization ($mil)	**CN$365**
Short Interest Ratio (days)	**0.4**
Institutional Ownership (%)	**0**
Insider Ownership (%)	**0**
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/M**
P/E using 2020 Estimate	**N/M**
P/E using 2021 Estimate	**N/M**

Risk Level	**High**
Type of Stock	**Small-Growth**
Industry	**Elec Comp-Semis**

ZACKS ESTIMATES

Revenue
(in millions of US$)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2019	$0.0 A	$0.0 A	$0.0 A	$0.0 A	$0.0 A
2020	$0.0 A	$0.0 A	$0.0 A	$0.0 A	$0.0 A
2021	$0.0 A	$0.2 A	$0.0 E	$0.2 E	$0.4 E
2022					$15.0 E

Earnings Per Share

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2019	-$0.01 A	-$0.01 A	-$0.01 A	$0.01 A	$0.00 A
2020	-$0.01 A	-$0.02 A	-$0.01 A	-$0.02 A	-$0.06 A
2021	-$0.01 A	-$0.01 A	-$0.01 E	-$0.02 E	-$0.06 E
2022					-$0.05 E

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WHAT'S NEW

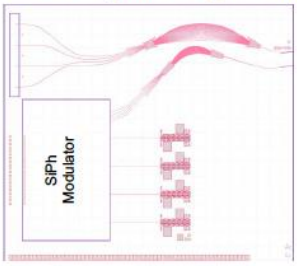
POET has been trying to show customers the radical improvements its platform can offer them and will be providing demos with its partner Siluxtek at its labs located near the China International Optoelectronics (CIOE) trade show. This show is being held September 16-18 in Shenzhen. It is the world's leading optoelectronic exhibition and more than 3,200 exhibitors will present the entire optoelectronic ecosystem there including information and communication, precision optics, sensing, lasers, infrared and photonics.

At this show the two will demo the 400G FR4 transmit optical engine and samples will be available beginning in Q1 2022. Its 400G receive optical engine will also be demonstrated at the show. While the 100G CWDM products sold into China will generate the first revenues for the joint venture, the 400G FR4 product is expected to provide the first revenues direct to POET possibly by Q3 2022.

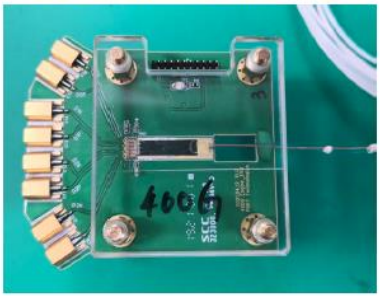
POET's 400G DR4/FR4 Product Line

- POET and Shanghai-based Siluxtek have partnered to conduct a live demo of a pre-alpha 400G FR4 Transmit Optical Engine at CIOE
  - FR4 has a 2km reach with four channels multiplexed into one fiber
  - DR4 has a 500m reach with four channels carried on separate fibers
- DR4/FR4 architecture and Optical Interposer designs completed and are currently being fabricated
- On schedule for 400G TxRx samples and deployment in Q1'22
- POET's 400G Receive (Rx) Optical Engine is being assembled and will be shipped to selected customers concurrent with CIOE

400G TxRx Optical Engine Design



400G Rx Optical Engine on EVB



Source: POET Technologies

While POET's 100G CWDM4 optical engine will be the first product to ship it will be the lower margin, higher volume product for the company as a transceiver module sells for about $150 in that market. POET's solution could bring the transceiver price down to near $100 and might generate $50 - $75 per unit sold. However its LR4 engines (long range) are going into product that costs three times more and POET's ASP will he much higher and margins will be much higher. Plus more than one of POET's 100G LR4 engines can go in a module. A single 100G LR4 transceiver costs as much as $350, with POET's pricing for its optical engine being about $150 per unit in low volumes. With two 100G optical engines that could be $300 and POET believes it can engineer up to 4 engines in a module for $500-$600. At a 50% margin is could make a gross margin of $250-$300 per unit compared a $25-$30 per unit gross margin of the 100G CWDM4.

According to LightCounting, both the 100G CWDM4 and the 100G LR4 annual market sizes were similar at $660 million for the former and $556 million for the latter. Given that POET has huge flexibility in pricing and its competition can not physically get their prices any lower because they do not have an integrated solution,

POET expects to dominate the market for LR4. Besides the cost advantage POET's design also uses 10% to 15% less power, and is smaller.

Q2 2021 Earnings Report

POET generated its first revenue, booking $209,100 in non-recurring engineering (NRE) fees for a specific optical interposer design project for the optical computing module.. We expect POET could book another NRE before year-end from a different customer in a different vertical market at a similar dollar amount. Product revenues might start in Q3 2022 from POET customers, not the joint venture customers, and might be orders from outside of China for LR4. Any orders received by the joint venture are expected to be reflected in "share of JV operations" not as revenue and could start being booked earlier than that, perhaps in Q2 2022.

R&D expenses were up $562,000 from last year and up $473,000 from Q1 2021. We expect them to be somewhat lumpy as different expenses hit different quarter as the company moves to production. Wages and benefits decreased by $222,732 (27%) to $593,280 in Q2 2021 from $816,012 in Q1 2021. In Q1 2021, the company paid a bonus of $250,000 to certain employees. Stock-based compensation was up $200,000 compared to last year. Total expenses were $4.1 million compared to $3.3 last year and $3.9 in Q1 2021. We expect the company to continue to increase spending as it approaches its production ramp.

In Q1 2021, the company paid $235,000 in interest expense, and that declined to $95,000 in Q2 as the convertible debentures converted. Since they are mostly gone, we expect interest expense to approach zero going forward.

The net loss was $4.2 million down from $6.2 million in Q2 2020. This resulted in an IFRS loss per share of $0.01 per share and a non-IFRS loss of $0.01 per share, compared to a loss of $0.02 and non-IFRS loss of $0.01 last year. Shares outstanding increased 10.8% to 345.3 million. As of August 11, 2021 there were 351 million shares outstanding, or 390 million shares fully diluted.

Balance Sheet

POET Technologies ended the June quarter with $21.9 million in cash and $171,185 in convertible debentures. Working capital was $19.7 million. POET received $1.6 million from the exercise of stock options and warrants during the quarter and convertible debenture holders converted $1 million of convertible debentures into 3.1 million units (one share plus one CN$0.50 warrant.)

If the company burns $3.5 million per quarter, that should get it six or seven quarters of runway even without any revenues. That would be beyond the end of 2022 by which time we expect it to be generating meaningful revenues. Any revenue between now and then will get it even further. There are now 351 million primary shares outstanding and 389 million fully diluted, as well as 70 million warrants and options outstanding that are in the money, which could raise an additional $24 million dollars. The company expects that at the least the $0.39 warrants which expire November 2nd will bring in an additional $5.5 million. It believes that it needs approximately $27 million in cash to get through the next two years.

The company has filed a $300 million shelf offering, is talking to bankers, and is on tracked to be listed on NASDAQ in Q4 2021 or Q1 2022.

During the Quarter

On April 6, 2021, POET granted 4,831,250 options, exercisable for 10 years, at CAD$1.19, to directors, employees and consultants.

On April 22, the company announced it had completed the design of a 100G LR4 (4 channel Long Reach) optical engine with a reach of 10 kilometers for client-side interconnects to data centers, enterprises, and edge computing networks.

KEY POINTS

- The Holy Grail in photonics is cost reduction (through efficiencies in process and materials) combined with lower power consumption. Throw in a smaller size, and higher performance, and customers should beat a path to your door. POET believes it can provide all four with its proprietary "optical interposer" based on a novel low-loss material that can allow multiple components to be integrated into a single package entirely at wafer-scale. What this means is that it can eliminate steps in the labor-intensive assembly process currently used when manufacturing optical transceivers. Manual assembly results in higher scrap rates, longer production times, and higher equipment costs. Also, its base material is far better suited to use in the management of light than silicon due to its lower loss and planar architecture, thus allowing lower powered lasers, resulting in lower power consumption and the ability to use less expensive lasers. POET hopes to disrupt the current market for photonics devices and have its Optical Engine platform become the standard in the industry.

- On October 22nd, POET established a $50 million joint venture with Xiamen Sanan Integrated Circuit Co. Ltd. of Xiamen, China. POET is contributing know how and a license to some of its technology, and Xiamen is contributing intellectual property, capital and production facilities. It will ultimately be 53% owned by Sanan IC and 47% by POET. Its first products will be optical engines to be sold to manufacturers of 100G, 200G, and 400G devices for use in data centers and telecommunications. This joint venture could generate as much as $200-$300 million in revenues per year by 2025 by taking modest market share.

- This quarter it started booking revenues again with the first being from an NRE contract. It expects volume production of product to start in the first half of 2022.

- The stock currently trades at a fully diluted enterprise value of US$293 million. The global market for optical transceivers is estimated to be $5.7 billion in 2020 and projected to reach a value of $9.2 billion by 2025, representing a CAGR of 10.0%, according to MarketsandMarkets Research Private Ltd. POET's product is a component of an optical transceiver and market is about a third of the transceiver market. If POET can secure even a small portion of that market with its unique offering, its valuation should far exceed its current price. We believe the stock could be worth CN$2.81 based on US$200 million in revenues in 2025 at 12.3xs EV to Sales, discounted at 30% back to present value.

VALUATION

POET's business model would make it similar to fabless semiconductor companies. Third parties would provide the production of its devices and we expect it would have margins similar to those companies below. They trade at an average of 12.3xs enterprise value to estimated 2021 revenues. Currently POET trades at an enterprise value of $293 million using a fully diluted share count. We need to look further out to where we think revenues would be by 2025. If we say the joint venture is able to reach $200 million in revenues by then and the rest of the business can ramp to $100 million that would be $200 million in revenues for POET in 2025. Using 12.3xs gives us an enterprise valuation of $2.46 billion, a market value of $2.48 billion or $6.38 per share by 2024 using today's fully diluted share count of 390 million shares. This would be a present value of US$2.23 or CN$2.81 per share discounted by 30% per year

Company	Ticker	2022E	2021E	LTM	EBITDA	EBIDTA Margin	Enterprise Value / Sales 2022E	2021E	LTM	EV/EBITDA	Included in Average?	Ent. Value
AMD	AMD	$17,020	$14,730	$13,340	3,440	26%	7.3x	8.4x	9.3x	36.0x	y	123,700
Broadcom	AVGO	NA	$27,700	$25,550	13,060	51%	NA	8.2x	8.9x	17.3x	y	226,300
Cirrus Logic	CRUS	NA	$15,240	$1,400	285	20%	NA	0.3x	3.1x	15.3x	y	4,370
Lightwave Logic	LWLG	NA	NA	$0	(9)	NM	NA	NA	NA	-84.4x	n	768
Marvell	MRVL	$5,030	$4,270	$3,110	729	23%	10.2x	12.1x	16.6x	70.7x	y	51,520
Monolithic Power Sys	MPWR	$1,370	$1,170	$1,040	236	23%	15.5x	18.1x	20.4x	89.7x	y	21,200
NVIDIA	NVDA	$27,530	$24,890	$21,900	8,490	39%	18.6x	20.6x	23.4x	60.3x	y	511,740
Rockley Photonics	RKLY	$79	$40	$21	(55)	-256%	14.6x	28.8x	53.7x	-21.0x	y	1,151
Qualcomm	QCOM	NA	$34,500	$32,580	11,830.0	36%	NA	4.9x	5.2x	14.2x	y	168,000
Xilinx	XLNX	NA	$3,526	$3,300	977.8	30%	NA	9.4x	10.0x	33.7x	y	33,000
Average						**-1%**	**13.2x**	**12.3x**	**16.7x**	**19.3x**		**95,146**

For the valuation we calculated the company's fully diluted share count using the treasury stock method at **390 million fully diluted shares** outstanding.

Warrant and Option Stack
30-Jun-21

Expiration	Type	Holder	Ave. Strike Price CAD	Ave. Strike Price USD	Number	Value CAD	Value USD
2021	Options	Employee	$ 0.51	$ 0.38	25,000	$ 12,750	$ 9,563
2022	Options	Employee	$ 0.23	$ 0.17	25,000	$ 5,750	$ 4,313
2024	Options	Employee	$ 0.32	$ 0.24	300,000	$ 96,000	$ 72,000
2026	Options	Employee	$ 0.76	$ 0.57	1,975,000	$ 1,501,000	$ 1,125,750
2027	Options	Employee	$ 0.32	$ 0.24	6,893,625	$ 2,205,960	$ 1,654,470
2028	Options	Employee	$ 0.44	$ 0.33	8,137,816	$ 3,580,639	$ 2,685,479
2029	Options	Employee	$ 0.36	$ 0.27	15,480,439	$ 5,572,958	$ 4,179,719
2030	Options	Employee	$ 0.47	$ 0.35	8,953,925	$ 4,208,345	$ 3,156,259
2031	Options	Employee	$ 0.81	$ 0.61	1,450,000	$ 1,174,500	$ 880,875
2031	Options	Employee	$ 1.19	$ 0.89	5,481,250	$ 6,522,688	$ 4,892,016
2021	Debentures	Debenture	$ 0.40	$ 0.30	630,000	$ 252,000	$ 189,000
2023	Warrants	Debenture	$ 0.50	$ 0.38	11,202,500	$ 5,601,250	$ 4,200,938
11/2/21	Warrants	Public Offering	$ 0.52	$ 0.39	14,048,757	$ 7,305,354	$ 5,479,015
2/11/23	Warrants	Private placement	$ 1.15	$ 0.86	17,647,200	$ 20,294,280	$ 15,220,710
2/11/23	Broker warrants	Private placement	$ 0.85	$ 0.64	1,058,832	$ 900,007	$ 675,005
					93,309,344	$ 59,233,480	**$ 44,425,110**

Fully Diluted Shares Using Treasury Stock Method

Share Outstanding	349,322,516	
In money Warrants	26,310,089	
In money Options	43,240,805	
Debentures	630,000	
Total in money	419,503,410	
Fully diluted shares	419,503,410	
Cash raised by warrants and options	24,312,385	
Share purchased by cash raised	29,649,249	
Current share price $	$0.82	8/22/21
Fully diluted shares, TS Method	389,854,161	

Since POET already qualifies (other than stock price) to uplist to NASDAQ, we believe it may uplist and reverse split sometime in the future when it has hit more milestones and certainly should it need to raise any capital. We do not believe this would happen before products are ready to go into large-scale production.

RISKS

- POET is a startup and has virtually no revenues. It may not be able to close customers if its technology does not work or work within needed parameters. If it were it to use up its current cash without reaching cash breakeven, to would need to raise new capital from investors, which could dilute current shareholders.

- Many potential customers may be hesitant to so business with a small, money losing start up, making market penetration even more difficult.

- Many of the employees work in states that have shut down businesses and travel and have had to work from home. They have been unable to go to its lab to continue to research and much of marketing efforts have been hindered by the inability to travel. It is not known when California, Pennsylvania, or New Jersey will lift their restrictions.

- The joint venture may take longer to book sales, ramp slower or produce less than expected sales and profits. The current foundry capacity shortage has caused the timetable for the company producing and shipping samples to customers and we believe industry conditions beyond its control could lead to further delays.

INCOME STATEMENT

	Q1 20	Q2 20	Q3 20	Q4 20	Q1 21	Q2 21	Q3 21E	Q4 21E	2020	2021E	2022E
Revenue	**$ 0**	**$ 0**	**$ 0**	**$ 0**	**$ 0**	**$ 209,100**	**$ 0**	**$ 200,000**	**$ 0**	**$ 409,100**	**$ 15,000,000**
Cost of revenue	0	0	0	0	0	0	0	0	0	0	7,500,000
Gross margin	0	0	0	0	0	209,100	0	200,000	0	409,100	7,500,000
Gross margin %	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	50.0%
Operating expenses											
R&D	1,419,744	1,250,475	1,217,849	2,229,672	1,339,784	1,812,924	1,850,000	1,900,000	6,117,740	6,902,708	9,120,000
Depreciation and amortization	174,317	189,582	206,819	242,385	252,731	270,189	270,189	271,000	813,103	1,064,109	1,100,000
Professional fees	125,001	177,149	123,664	374,737	284,105	247,742	400,000	500,000	800,551	1,431,847	800,000
Wages and benefits	543,571	475,114	442,605	720,877	816,012	593,280	1,100,000	2,000,000	2,182,167	4,509,292	9,000,000
Stock-based compensation	776,783	846,485	1,096,013	893,664	820,538	1,047,766	1,100,000	800,000	3,612,945	3,768,304	3,400,000
General expenses and rent	213,027	559,679	167,608	305,495	357,980	381,539	380,000	390,000	1,245,809	1,509,519	1,600,000
Operating expenses	3,252,443	3,498,484	3,254,558	4,766,830	3,871,150	4,353,440	5,100,189	5,861,000	14,772,315	19,185,779	25,020,000
Operating income	(3,252,443)	(3,498,484)	(3,254,558)	(4,766,830)	(3,871,150)	(4,144,340)	(5,100,189)	(5,661,000)	(14,772,315)	(18,776,679)	(17,520,000)
Debt-issuance cost	0	0	0	0	0	0	0	0	0	0	0
Impairment and other loss	0	(2,500,000)	0	0	0	0	0	0	(2,500,000)	0	0
Interest expense	(216,684)	(228,591)	(243,805)	(248,823)	(234,579)	(94,799)	(5,136)	(5,136)	(937,903)	(339,649)	(20,542)
Other income	1,362	18,543	13,910	7,333	7,309	19,772	1,300	1,300	41,148	29,681	32,000
Pretax loss from operations	**(3,467,765)**	**(6,208,532)**	**(3,484,453)**	**(5,008,320)**	**(4,098,420)**	**(4,219,367)**	**(5,104,025)**	**(5,664,836)**	**(18,169,070)**	**(19,086,647)**	**(17,508,542)**
Income tax recovery	0	0	0	0	0	0	0	0	0	0	0
Profit before joint venture	(3,467,765)	(6,208,532)	(3,484,453)	(5,008,320)	(4,098,420)	(4,219,367)	(5,104,025)	(5,664,836)	(18,169,070)	(19,086,647)	(17,508,542)
Income from joint venture	0	0	0	0	0	0	0	0	0	0	1,500,000
Net loss	(3,467,765)	(6,208,532)	(3,484,453)	(5,008,320)	(4,098,420)	(4,219,367)	(5,104,025)	(5,664,836)	(18,169,070)	(19,086,647)	(16,008,542)
Non-GAAP net loss	(2,690,982)	(2,862,047)	(2,388,440)	(4,114,656)	(3,277,882)	(3,171,601)	(4,004,025)	(4,864,836)	(12,056,125)	(15,318,343)	(12,608,542)
Basic and diluted net loss per share	$ (0.01)	$ (0.02)	$ (0.01)	$ (0.02)	$ (0.01)	$ (0.01)	$ (0.01)	$ (0.02)	$ (0.06)	$ (0.06)	$ (0.05)
Yr-to-yr growth				42.3%	6.6%	-42.7%	21.9%	-5.6%		-10.5%	-19.1%
Non-GAAP loss per share	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.04)	(0.04)	(0.04)
Share outstanding (millions)	289.4	291.2	292.6	293.9	320.8	345.3	351.5	352.0	291.8	342.4	355.0
Yr-to-yr growth	0.5%	1.1%	1.5%	1.9%	10.8%	18.6%	20.1%	19.8%	1.2%	17.3%	3.7%
EBITDA	(2,301,343)	(2,462,417)	(1,951,726)	(3,630,781)	(2,797,881)	(2,826,385)	(3,730,000)	(4,590,000)	(10,346,267)	(13,944,266)	(13,020,000)

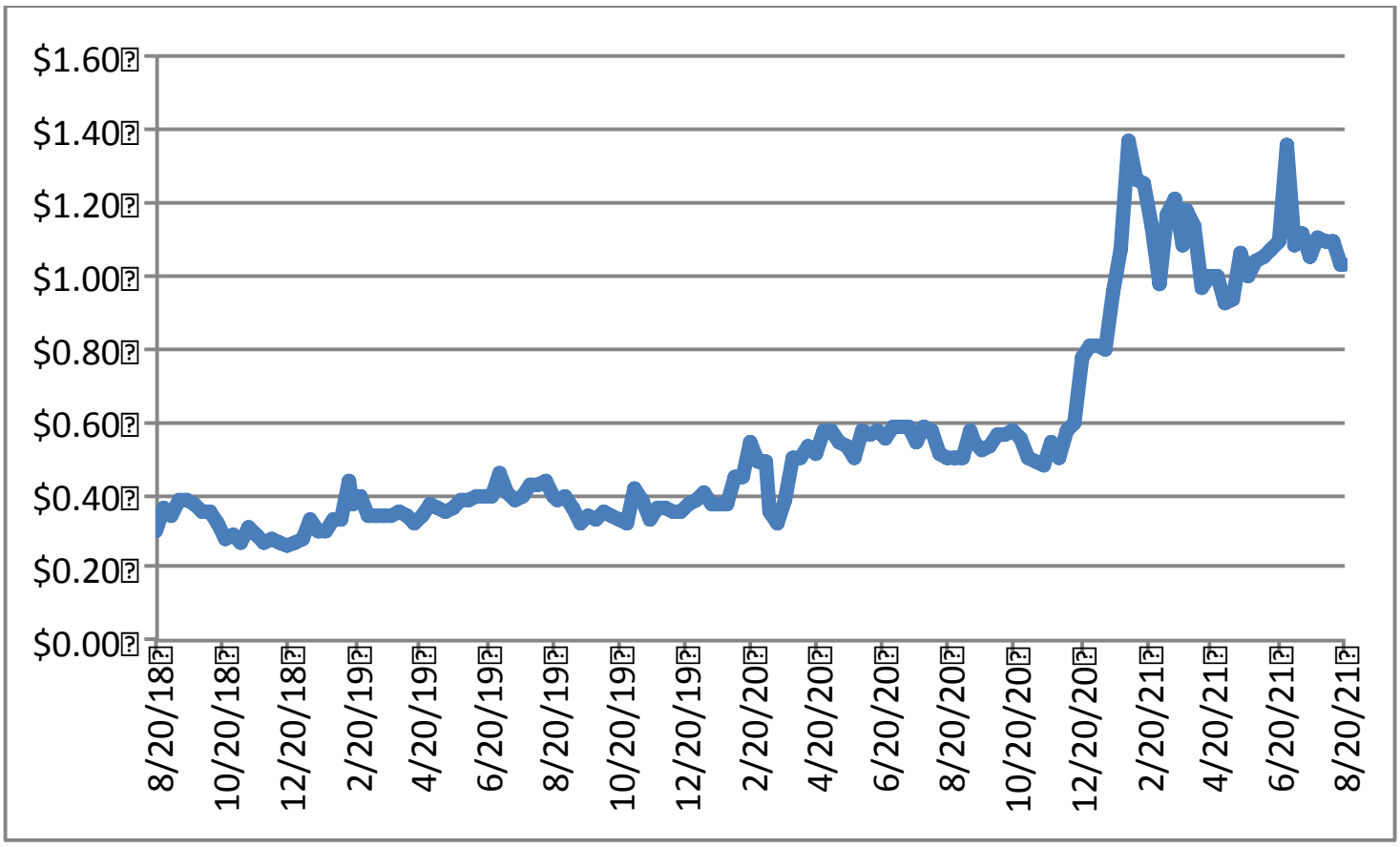
BALANCE SHEET

	June 30, 2021	Mar. 31, 2021	Qtr-Qtr % Growth	June 30, 2020	Yr-Yr % Growth
Current					
Cash and cash equivalents	**$ 21,941,873**	**$ 23,472,255**	-7%	**$ 11,895,907**	84%
Accounts receivable	207,260	0	0%	1,000,000	-79%
Prepaids and other current assets	294,917	1,092,016	-73%	269,038	10%
Current Assets	22,444,050	24,564,271	-9%	13,164,945	70%
Property and equipment	3,372,863	3,070,871	10%	3,570,678	-6%
Patents and licenses	406,688	421,682	-4%	443,658	-8%
Right of use asset	424,901	472,396	-10%	384,083	11%
Total Assets	26,648,502	28,529,220	-7%	17,563,364	52%
Liabilities					
Accounts payable and accrued liabilities	2,165,686	2,613,155	-17%	2,394,443	-10%
Covid-19 government support loans	189,723	171,185	11%	46,687	306%
Lease liability	199,148	189,723	5%	107,348	86%
Convertible debentures	**171,185**	**1,169,512**	-85%	**2,946,180**	-94%
Current Liabilities	2,725,742	4,143,575	-34%	5,494,658	-50%
Non-current covid-19 govt support loans	47,822	47,402	1%	169,520	-72%
Lease liability	258,002	300,952	-14%	283,853	-9%
Total liabilities	3,031,566	4,491,929	-33%	5,948,031	-49%
Shareholders' Equity					
Share capital	138,800,262	135,689,974	2%	113,266,706	23%
Equity component of loan payable	18,747	192,051	-90%	576,223	-97%
Warrants & comp options	7,711,219	7,819,345	-1%	7,940,842	-3%
Contributed surplus	44,759,499	43,721,782	2%	40,533,864	10%
Accumulated other comprehensive loss	(1,850,300)	(1,969,564)	-6%	(1,877,197)	-1%
Deficit	(165,824,491)	(161,416,297)	3%	(148,825,104)	11%
Shareholder's Equity	23,614,936	24,037,291	-2%	11,615,334	103%
Tot Liabilities and Share. Equity	$ 26,646,502	$ 28,529,220	-7%	$ 17,563,365	52%
Cash	$ 21,941,873	$ 23,472,255	-7%	$ 11,895,907	84%
Cash per share	0.06	0.08	-22%	0.04	56%
Current ratio	8.2	5.9	39%	2.4	244%
Working capital	19,718,308	20,420,696	-3%	7,670,287	157%
Debt	171,185	1,169,512	-85%	2,946,180	-94%
Debt/total assets	0.6%	4.1%	-84%	16.8%	-96%

CASH FLOWS

US Dollars	2019	Mar. 31, 2020	Jun. 30, 2020	Sep. 30, 2020	Dec. 31, 2020	2020	Mar. 31, 2021	Jun. 30, 2021
OPERATING ACTIVITIES								
Net loss	$ (5,952,875)	$ (3,467,765)	$ (6,208,532)	$ (3,484,453)	$ (5,008,320)	$ (18,169,070)	$ (4,098,420)	$ (4,408,194)
Discontinued operations, net	(5,481,757)	0	0	0	0	0	0	0
Net loss, continuing operations	(11,434,632)	(3,467,765)	(6,208,532)	(3,484,453)	(5,008,320)	(18,169,070)	(4,098,420)	(4,408,194)
Adjustments for:								
Depreciation of property and equipment	166,342	134,088	141,677	158,230	197,268	631,263	188,220	205,154
Amortization of patents and licenses	61,671	17,049	17,447	17,585	13,701	65,782	16,995	16,994
Amortization of debt issuance costs	372,340	0	0	0	0	0	0	0
Amortization of right of use assets	15,683	23,180	30,456	31,006	31,415	116,057	47,516	48,041
Other operating costs	0	0	0	0	0	0	0	13,814
Accretion of debt discount on converts & int.	0	108,831	129,378	141,332	0	524,095	128,229	48,768
Amortization of debt discount	280,829	0	0	0	0	0	0	0
Impairment loss	1,764,459	0	0	0	0	0	0	0
Stock-based compensation	2,888,141	776,783	846,485	1,096,013	893,664	3,612,945	820,538	1,236,593
Non-cash settled operating costs	0	0	0	0	0	910,738	0	0
Income tax recovery	(292,740)	0	0	0	0	0	0	0
Expected credit loss allowance	0	0	2,500,000	0	0	2,500,000	0	0
Gain on lease modification	0	0	0	0	0	(786)	0	0
Non-cash foreign exchange	0	0	0	0	161,000	161,000	0	0
Net change in non-cash working capital accounts:								
Accounts receivable	0	0	0	0	0	0	0	(209,100)
Prepaid and other current assets	(685,667)	586,983	(47,690)	147,664	(454,435)	232,522	(465,106)	798,311
Accounts payable and accrued liabilities	420,457	(194,610)	916,570	(997,963)	253,493	(22,510)	882,528	(450,207)
Cash flows from continuing operating activities	(6,443,117)	(2,015,461)	(1,674,209)	(2,890,586)	(2,856,922)	(9,437,964)	(2,479,500)	(2,699,826)
Cash flows from discontinued operating activities	(2,951,104)	0	0	0	0	0	0	0
INVESTING ACTIVITIES								
Proceeds from sale of discont. operations	0	13,000,000	1,500,000	1,000,000	0	15,500,000	0	0
Purchase of property and equipment	(445,678)	(188,082)	(618,093)	(638,367)	(77,246)	(1,521,788)	(123,564)	(508,458)
Purchase of patents and licenses	(65,806)	0	(25,770)	0	(26,305)	(52,075)	0	0
Cash flows from investing activities, continuing	(511,484)	12,811,918	856,137	361,633	(103,551)	13,926,137	(123,564)	(508,458)
Cash flows from investing activities, discontinued	5,908,623	0	0	0	0	0	0	0
FINANCING ACTIVITIES								
Proceed from convertible debentures, net	3,352,849	0	0	0	0	0	0	0
Proceeds from loan payable, net	4,000,000	0	0	0	0	0	0	0
Proceeds from COVID-19 loans	0	0	216,207	0	1,944	218,151	0	0
Repayment of loan payable	(4,000,000)	0	0	0	0	0	0	0
Issue of common shares for cash, net	60,028	0	361,612	(361,612)	1,088,450	1,088,450	19,150,387	1,588,712
Exercise of warrants and options	0	162,258	(162,258)	566,492	(566,492)	0	0	0
Payment of lease liability	(19,162)	(28,325)	(37,993)	(38,673)	(39,151)	(144,142)	(58,720)	(60,064)
Cash flows from financing, continuing activities	3,393,715	133,933	377,568	166,207	484,751	1,162,459	19,091,667	1,528,648
Cash flows from financing, discontinued activities	(258,460)	0	0	0	0	0	0	0
EFFECT OF EX RATE ON CASH, Continuing	(263,902)	(30,964)	9,642	(88,146)	(96,399)	(205,867)	110,758	149,254
EFFECT OF EX RATE ON CASH, Discontinued	(14,010)	0	0	0	0	0	0	0
NET CHANGE IN CASH, Continuing	(3,824,788)	10,899,426	(431,648)	(2,450,892)	(2,572,121)	5,444,765	16,599,361	(1,530,382)
NET CHANGE IN CASH, Discontinued	2,685,049	0	0	0	0	0	0	0
CASH AND CASH EQUIVALENTS, beginning	2,567,868	1,428,129	12,327,555	11,895,907	9,445,015	1,428,129	6,872,894	23,472,255
CASH AND CASH EQUIVALENTS, end	1,428,129	12,327,555	11,895,907	9,445,015	6,872,894	6,872,894	23,472,255	21,941,873
Cash flow continuing	(6,177,907)	(2,407,834)	(2,543,089)	(2,040,287)	(3,711,272)	(9,647,976)	(2,896,922)	(2,852,644)
Free cash flow continuing	(6,689,391)	10,404,084	(1,686,952)	(1,678,654)	(3,814,823)	4,278,161	(3,020,486)	(3,361,102)

HISTORICAL STOCK PRICE



Source: Zacks Investment Research

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