

## **MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE THREE-MONTH PERIOD AND NINE-MONTH PERIOD ENDED MAY 31, 2022**

The following comments are intended to provide a review and analysis of the results of operations, financial condition, and cash flows of OpSens Inc. for the three-month and nine-month periods ended May 31, 2022, in comparison with the corresponding periods ended May 31, 2021. In this Management's Discussion and Analysis ("MD&A"), "OpSens," "the Company," "we," "us" and "our" mean OpSens Inc. and its subsidiaries. This MD&A should be read and interpreted in conjunction with the information contained in our annual consolidated financial statements for the years ended August 31, 2021, and 2020, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. This document was prepared on July 13, 2022. All amounts are in Canadian dollars unless otherwise indicated.

This MD&A contains forward-looking statements with respect to the Company. These forward-looking statements, by their nature, require the Company to make certain assumptions and necessarily involve known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied in these forward-looking statements. Forward-looking statements are not guarantees of performance. These forward-looking statements, including financial outlooks, may involve, but are not limited to, comments with respect to the Company's business or financial objectives, its strategies or future actions, its targets, expectations for financial condition or outlook for operations and future contingent payments. Words such as "may," "will," "would," "could," "expect," "believe," "plan," "anticipate," "intend," "estimate," "continue," or the negative or comparable terminology, as well as terms usually used in the future and conditional, are intended to identify forward-looking statements.

Information contained in forward-looking statements is based upon certain material assumptions that were applied in drawing a conclusion or making a forecast or projection, including management's perceptions of historical trends, current conditions and expected future developments, as well as other considerations that are believed to be appropriate in the circumstances. The Company considers these assumptions to be reasonable based on all currently available information but cautions the reader that these assumptions regarding future events, many of which are beyond its control, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect the Company and its business. The forward-looking information set forth therein reflects the Company's expectations as of July 13, 2022, and is subject to change after this date. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law.

### **COVID-19**

The spread of COVID-19 virus continues to disrupt the global economic conditions due to its unpredictability and instability. So, there are still some economic and business uncertainties that could have an impact on the critical accounting estimates, assumptions and judgments that are made by management when preparing the condensed consolidated interim financial statements. Accordingly, management continues to monitor and evaluate the situation and its impact on the Company's activities.

The COVID-19 pandemic had a moderate impact on the condensed consolidated interim financial statements for the nine-month period ended May 31, 2022, following the supply chain disruptions that affected manufacturing and distribution of its products and hospitals procedure disruptions. At the current time, it is not possible to reliably estimate the duration and impact that the global pandemic may have on the Company's financial results, business conditions and cash flows because of uncertainties about future developments. The Company expects a decrease in the negative impacts generated by the COVID-19 pandemic over the coming months.

## OVERVIEW

The Company's primary focus is the measurement of Fractional Flow Reserve ("FFR") and the diastolic pressure algorithm ("dPR") in the coronary artery disease market. OpSens offers an optical guidewire (OptoWire) powered by the 2<sup>nd</sup> generation optical sensor, Fidela, to measure pressure in the diagnosis and to improve clinical outcomes in patients with coronary artery disease. OpSens also operates in the Industrial segment through its wholly-owned subsidiary OpSens Solutions Inc. ("Solutions"). Solutions develops, manufactures, and installs innovative measurement solutions using fibre optic sensors for critical and demanding industrial applications.

OpSens owns 21 patents and has four pending patents to protect its technologies in the Medical and Industrial sectors.

## SECTORS OF ACTIVITY

**In the Medical sector**, OpSens markets the OptoWire and OptoMonitor to diagnose coronary artery disease. The OptoWire provides cardiologists with an optimized pressure guidewire to navigate coronary arteries and cross blockages with ease while measuring intracoronary blood pressure. This procedure is called FFR measurement, also referred to as physiological measurement.

OpSens has obtained the required regulatory approvals for the OptoWire and OptoMonitor in the world's largest markets, namely the United States, Europe (including the Middle East), Japan and Canada. Furthermore, the need to diagnose coronary artery disease without hyperemia induced by the injection of heart-stimulating drugs has emerged. OpSens has developed its proprietary diastolic pressure ratio to meet this need. Non-Hyperemic Pressure Resting indices ("NHPR"), such as OpSens' dPR, are beneficial for some patients as they reduce procedure time, costs, and discomfort. This product is available through the OptoMonitor and works in combination with the OptoWire. OpSens' dPR is marketed in Japan, the United States, Canada, and Europe.

OpSens has established a direct sales force in the United States and Canada and utilizes distributors in Europe (including the Middle East) and Japan.

OpSens also provides a broad selection of miniature optical sensors to measure pressure and temperature that can be used in a wide range of applications and can be integrated into other medical devices.

OpSens is currently developing the SavvyWire, a product targeting the market of structural cardiology, one of the fastest growing segments of cardiology. The SavvyWire is developed specifically for transcatheter aortic valve replacement ("TAVR"). The SavvyWire was approved in Canada in Q3 2022.

**In the Industrial sector**, OpSens' expertise, technology, and products meet the needs of multiple markets, including aeronautics, geotechnical, infrastructures, nuclear, mining, military, and others. OpSens' portfolio of products and technologies can be adapted to measure various parameters under the most difficult conditions and bring significant benefits in terms of optimizing production and reducing risks to the environment and health.

As an example, fibre optic sensors perform well in the presence of electromagnetic fields, radio frequencies, microwaves, high-intensity magnetic waves (MR) or high temperatures, elements that typically disrupt results with conventional sensors. Customers' needs are wide-ranging and require measuring various parameters like pressure, temperature, strain, and others.

The Company focuses on business opportunities with the highest returns and has developed new products to fulfill their specific needs. As an example, the new OPP-GD fibre optic differential pressure sensor and the new OEC fibre optic extensometer sensors have grabbed the attention of many industries such as aeronautics and energy.

## MARKET OVERVIEW

**In the Medical sector**, coronary artery disease represents a significant and growing opportunity for the Company. The prevalence of coronary artery disease is increasing rapidly. In the AHA report “Heart Disease and Stroke Statistics” - based on health data compiled in more than 190 countries - coronary heart disease was the leading cause of death worldwide in 2017 with 17.3 million deaths per year. This number is expected to exceed 23.6 million deaths in 2030. Coronary heart disease is one of the leading causes of death in the developed world, and the cost of managing and treating this disease is a significant burden to society. The benefits of FFR in patients with chronic coronary artery disease were demonstrated through randomized clinical trials studies such as FAME I and FAME II published in 2009 and 2012 in the New England Journal of Medicine (NEJM) and several other outcome studies. FFR-guided treatment, compared to assessment based only on angiography, led, after one year, respectively to a reduction of about 30% in mortality, myocardial infarction, readmission for revascularization through percutaneous coronary intervention and coronary bypass (FAME I study). FFR-guided treatment, compared to optimal medical therapy, also showed a reduction of almost 90% in the risk of urgent revascularizations (FAME II study). Several reports also showed how inaccurate diagnoses can lead to unnecessary use of “stents” to treat the coronary artery disease.

FFR-guided treatment, following the publication of FAME I and FAME II, have been recognized with the highest recommendation (Class IA) by the European Society of Cardiology (ESC). In the United States, support for the increase in the use of physiologic measurement continues to grow. In March 2017, the appropriate use criteria (“AUC”) for chronic ischemic heart disease were updated to emphasize the use of FFR given its importance. The goal of the AUC is to provide a framework for assessing general clinical practices and improving the quality of care. The new AUCs reflect a recognition of the role and value of FFR, which should be beneficial for an expansion in the use of FFR technologies. Payers, including Medicare, use the AUC to help formulate their repayment criteria.

In April 2018, the Ministry of Health, Labour and Welfare (“MHLW”) in Japan introduced a new regulation requiring the physiology evaluation of all coronary artery stenosis prior to its treatment, specifically mentioning FFR as an evaluation method. The MHLW revised medical fees and established a requirement to assess functional ischemia (blockage of arteries) prior to treatment.

In the late 2010s, the use of non-hyperemic pressure ratios (NHPRs) has been an important factor to increase coronary physiology penetration to make faster and easier assessment of coronary occlusions, by removing the need for hyperemic drug injection. Like FFR, NHPRs also obtained the highest recommendation in the clinical guidelines for the diagnostic assessment of coronary lesions thanks to the DEFINE and SWEDEHEART studies.

FFR and NHPR-guided coronary interventions have also been validated in patients with Acute Coronary Syndromes (ACS) as a diagnostic tool to assess the severity of the non-culprit occlusion after the culprit blockage’s treatment, showing a reduction in major adverse cardiovascular events compared to a culprit-occlusion-only treatment strategy, with FFR being used in both a staged (DANAMI-3-PRIMULTI trial, published on LANCET) and acute (COMPARE-ACUTE trial, published on NEJM) setting. This approach for patients with acute disease can expand the benefits of FFR to a population twice as large as the chronic one.

These developments contribute to the steady growth of the coronary artery disease measurement market. According to management and industry source estimates<sup>1</sup>, this market exceeded US\$600 million worldwide in 2021 and anticipates growth in the medium term to reach US\$1 billion. This growth will be progressively fueled by upcoming technologies implementing angiography-based or computed tomography (CT)-based physiology measurements. Currently these assessments are being validated and the penetration in the physiology market is mainly due to the clinical studies being performed. Angio and CT-based physiology is expected to partially expand at the expense of the wire-based physiology procedures, but mainly to grow the overall market addressing patients not being diagnosed with physiology today.

**Aortic Valve Stenosis** occurs when the heart’s aortic valve becomes diseased and subsequently narrows. This narrowing prevents the valve from fully opening, reducing, or blocking the blood flow from the heart into the aorta (the main artery to the body) and onward to the rest of the body. In multiple studies, minimally invasive TAVR has been shown to be superior to open-chest Surgical Aortic Valve Replacement (SAVR), with benefits including reduction in hospital stay and lower mortality, for both high and low-risk patients.

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<sup>1</sup> OpSens FFR Market Calculations based on GRAND VIEW RESEARCH (Feb. 2019).

The TAVR market size is significant and growing, with an estimated 2022 global market opportunity of \$5 billion doubling to an estimated size of \$10 billion by 2028<sup>(2)</sup>. This overall increase is being underpinned with investments into device innovation combined with clinical<sup>(3)</sup> and economic evidence generation for intermediate and low risk - and eventually asymptomatic patients – leading to larger patient populations in currently served markets, and growing adoption in emerging markets. With the SavvyWire, OpSens is targeting a portion of that market. We currently estimate that global 2022 TAVR volume will approach 250,000, with nearly 50% of the implants occurring in North America and another 30% in Western Europe<sup>(4)</sup>.

OpSens is developing a guidewire designed for sensor-guided TAVR. The introduction of this innovative guidewire will usher in a new era of sensor-guided TAVR with the ability to precisely control multiple critical functions, provide excellent valve delivery support and perform on-label accurate pacing, while allowing continuous, accurate, real-time measurement of hemodynamic pressure during the TAVR procedure. These key attributes are considered significant benefits to the medical community, and we believe have been highly anticipated by physicians who perform TAVR procedures. We have achieved design freeze, completed a 20-patient First in-Human Study, and submitted for FDA 510(k) clearance. The Savvywire was approved in Canada in Q3 2022 and we completed the first successful TAVR procedures and revenues.

The overall value of the TAVR guidewire market is dependent on continued TAVR market expansion, growing adoption of pre-shaped guidewires and is sensitive to pricing constraints, especially in geographies with national healthcare systems. With anticipated growth in the TAVR market, adoption of pre-shaped guidewires, and additional clinical utility, we anticipate the global unit volume opportunity to exceed 400,000 units by 2028<sup>(4)</sup>.

OpSens started to develop, evolve, and execute an integrated commercialization plan for the SavvyWire™, including manufacturing scaleup, the hiring of additional sales professionals, the development of marketing materials, the establishment of clinical evidence, and we have partnered with several physician thought-leaders who provide key insights.

**In the Industrial sector**, under this reportable segment, the Corporation's technology, expertise, and products can serve several markets including aeronautics, geotechnical, infrastructures, nuclear, mining, military, and others. The Company focuses mainly on the following markets:

- **Nuclear Market:** the opportunities in this market are related principally to new nuclear technologies to produce energy. The new and recently patented fibre optic differential pressure sensor is the main solution for that market;
- **Aeronautic Market:** the opportunities in this market are principally related to fuel monitoring systems for aircrafts. A new industrial version of the absolute pressure sensor and the recent addition of a differential pressure sensor are the main products for these applications; and
- **Traditional Niche Applications Market:** they include niche applications in which the Company is currently engaged, such as electro-pyrotechnic devices.

## COMPETITION

**In the Medical sector**, coronary artery disease measurement market has five competitors and is currently dominated by two major players who commercialize standard electrical technology. Competition is based on technological advantages, brand recognition, customer service, marketing support and price. Over the past years, CT and angiography-based FFR technologies, have emerged with new tools for functional lesion assessment without the need for dedicated pressure wires. For TAVR, the current global guidewire market is segmented into straight and pre-shaped guidewires and is currently dominated by pre-shaped wires supplied by two companies. OpSens' entrance into this

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2 Edwards Lifesciences, Dec. 8, 2021 Investor Conference, accessed February, 2022.

3. Edwards Lifesciences: PARTNER 3, EARLY TAVR (asymptomatic severe aortic stenosis), PROGRESS Trial (moderate AS) and Medtronic: Evolut in Low-Risk patients.

4. OpSens TAVR and guidewire market calculations based on iData Research Inc. (Feb. 2022).

market is expected to be disruptive, as no current TAVR guidewire combines the benefits of being pre-shaped with the ability to deliver on-label rapid pacing while accurately measuring real-time hemodynamic pressure.

**In the Industrial sector**, there is a significant number of competitors. Competition is based primarily on technological advantages. Our direct competition is made up of both opened and closed-ended companies with a global presence.

## **CORPORATE GROWTH STRATEGY**

OpSens' growth strategy is to become a key player in the Medical sector focusing on the coronary artery disease measurement, where its products and technologies offer major advantages over the competition. The Company also aims to capitalize on its technologies and products in the industrial markets. To this end, the Company implements its corporate strategy based on its various segments of operations.

**In the Medical sector**, the Company's growth strategy in the field of interventional cardiology is carried out by:

- Increase of its market shares in the fast-growing coronary artery disease market.

To achieve this, management has set up the following sales forces:

- Direct Sales Force: OpSens has established a direct sales team, hiring a seasoned staff with solid expertise in coronary artery disease. This sales force has been implemented to increase OpSens' market and commercialization penetration in the United States and Canada. In the context of COVID-19, the Company adjusted its methods and the number of representatives using remote approaches rather than in-person visits to catheterization laboratories. In the short term, this approach was better aligned to customers wishing to limit the number of in-person visitors to hospitals. OpSens has started to increase its sales force and will continue to deploy increasingly in 2022. OpSens also targets agreements with group purchasing organizations to accelerate penetration, particularly in the United States. OpSens has successfully signed several agreements with group purchasing organizations; and
- Distributor Sales Force: OpSens has signed distribution agreements in Europe, Asia, and the Middle East. These agreements allow OpSens to focus on market penetration with leading business partners in their respective markets.

Interventional cardiologists have started focusing on measurements performed with the heart at rest. These measurements require greater accuracy and constant and repeated guidewire performance over time. With Fidela, its second-generation optical sensor, the Company is convinced that there will be a growing interest in the OptoWire's recognized features which include:

- Highly accurate measurement technology for improved reliability, essential to cardiologists' decision-making in the diagnosis of coronary artery disease; and
- Better and more trustworthy connectivity that is insensitive to blood contamination. The OptoWire can be easily disconnected to be used as interventional wire and reconnected to measure the post-intervention value without compromising accuracy.

Ease of use and seamless workflow of the monitoring system also play a significant role in the expansion of physiology assessment and OpSens is playing a growing role in the competitive arena both with hardware and software solutions aiming to integrate physiology in the interventional workflow.

- Clinical data

Major clinical studies previously suspended due to the COVID-19 pandemic have now fully resumed with pre-pandemic enrollment speed. New studies were designed and prepared during the pandemic with limited cathlab operation and are now about to start. OpSens aims to generate meaningful clinical data on OptoWire performance and benefit, but also on the importance of hemodynamic in the treatment of coronary artery disease. We are also planning clinical studies to come in 2023 on SavvyWire.

- Innovation

In this ever-evolving and state-of-the-art market, OpSens plans to leverage its expertise in fiber-optic sensing medical devices to create new coronary artery disease measurement products and develop new fibre optic sensing technologies for cardiology assessment that address other unmet medical needs. Commitment to innovation has always been a driving force behind the Company's success and desire to improve its intellectual property portfolio and value proposition for customers.

OpSens offers a broad selection of miniature optical sensors to measure pressure and temperature that can be used in a wide range of applications and that can be integrated into other medical devices. The Company aims to partner with key players in the industry. The partnership with Abiomed Inc. ("Abiomed"), for the use of its miniature sensors and technology, is an example of the type of partnership the Company targets.

**In the Industrial sector**, the Company's business strategy is achieved by:

- Target Market: OpSens Solutions' target markets are aeronautics, geotechnical, infrastructures, nuclear, mining, military, and others. These are markets where OpSens' products offer unique advantages over its competitors; and
- Innovation: OpSens Solutions continually invests in innovations for its products, so they can offer unique advantages over competitors. For example, the Company's optical strain and pressure sensors have received the attention of major players in the aeronautic industry because they require no shielding or grounding and because of their ease of deployment.

## NON-IFRS FINANCIAL MEASURES – EBITDAO

The Company quarterly reviews net income (loss) and Earnings Before Interest, Taxes, Depreciation, Amortization and Stock-based compensation costs (“EBITDAO”). EBITDAO has no normalized sense prescribed by IFRS. It is not very probable that this measure is comparable with measures of the same type presented by other issuers. EBITDAO is defined by the Company as the addition of net income (loss), financial expenses, taxes, depreciation and amortization and stock-based compensation costs. The Company uses EBITDAO for the purposes of evaluating its historical and prospective financial performance. This measure also helps the Company to plan and forecast for future periods as well as to make operational and strategic decisions. The Company believes that providing this information to investors, in addition to IFRS measures, allows to see the Company’s results through the eyes of management, and to better understand its historical and future financial performance.

## RECONCILIATION OF EBITDAO TO NET INCOME (LOSS)

(In thousands of Canadian dollars)	Three-month period ended May 31, 2022	Three-month period ended May 31, 2021	Nine-month period ended May 31, 2022	Nine-month period ended May 31, 2021
	\$	\$	\$	\$
Net income (loss)	(2,856)	(570)	(7,350)	64
Financial expenses	75	144	311	496
Depreciation of property, plant and equipment and right-of-use assets	397	397	1,171	1,158
Amortization of intangible assets	66	60	193	170
Stock-based compensation costs	213	161	912	329
Current income tax expense	9	16	43	35
<b>EBITDAO</b>	<b>(2,096)</b>	<b>208</b>	<b>(4,720)</b>	<b>2,252</b>

The negative variance of EBITDAO for the three-month period ended May 31, 2022, is mainly explained by the increase in our operating expenses and by lower gross margin in the medical segment.

The negative variance of EBITDAO for the nine-month period ended May 31, 2022, is mainly explained by the fact that we increased our operating expenses and by lower gross margin in all segments.

**SELECTED CONSOLIDATED FINANCIAL DATA**

(In thousands of Canadian dollars, except for information per share)	<b>Three-month period ended May 31, 2022</b>	<b>Three-month period ended May 31, 2021</b>	<b>Nine-month period ended May 31, 2022</b>	<b>Nine-month period ended May 31, 2021</b>
	\$	\$	\$	\$
<b>Revenues</b>				
Sales				
Medical	9,170	8,501	23,478	23,651
Industrial	874	713	2,596	2,692
	<u>10,044</u>	<u>9,214</u>	<u>26,074</u>	<u>26,343</u>
Other	32	19	197	56
	<u>10,076</u>	<u>9,233</u>	<u>26,271</u>	<u>26,399</u>
Cost of sales	4,938	3,809	12,846	11,734
<b>Gross margin</b>	<u>5,138</u>	<u>5,424</u>	<u>13,425</u>	<u>14,665</u>
Gross margin percentage	51%	59%	51%	56%
<b>Operating expenses</b>				
Administrative	1,886	1,722	5,950	4,679
Sales and marketing	3,639	2,316	8,237	5,458
Research and development	2,322	1,590	6,114	4,170
	<u>7,847</u>	<u>5,628</u>	<u>20,301</u>	<u>14,307</u>
Other income	-	(121)	-	(721)
Financial expenses	75	144	311	496
Loss on foreign currency	63	327	120	484
	<u>(2,847)</u>	<u>(554)</u>	<u>(7,307)</u>	<u>99</u>
Current income tax expense	9	16	43	35
<b>Net income (loss)</b>	<u>(2,856)</u>	<u>(570)</u>	<u>(7,350)</u>	<u>64</u>
<b>Basic and diluted net income (loss) per share</b>	<u>(0.03)</u>	<u>(0.01)</u>	<u>(0.07)</u>	<u>0.00</u>

The following table presents share-based payment and related expenses amounts recognized by the Company:

(In thousands of Canadian dollars)	<b>Three-month period ended May 31, 2022</b>	<b>Three-month period ended May 31, 2021</b>	<b>Nine-month period ended May 31, 2022</b>	<b>Nine-month period ended May 31, 2021</b>
	\$	\$	\$	\$
Cost of sales	7	9	23	22
Administrative	49	77	484	136
Sales and marketing	92	27	215	70
Research and development	65	48	190	101
<b>Stock-based compensation costs</b>	<u>213</u>	<u>161</u>	<u>912</u>	<u>329</u>

## **Revenues**

The Company reported revenues of \$10,076,000 for the three-month period ended May 31, 2022, compared to \$9,233,000 for the corresponding period in 2021, an increase of \$843,000 or 9%.

Sales in the Medical segment totalled \$9,170,000 (excluding other revenues) for the three-month period ended May 31, 2022, compared to \$8,501,000 for the same period in 2021, an increase of \$669,000. The increase in Medical segment revenues is explained by higher sales in the coronary artery disease measurement sales (FFR and dPR) of \$397,000 compared to the same period last year and by an increase in sales in the original equipment manufacturer (“OEM”) line of business of \$254,000 compared with the same period in 2021. The Company recorded its first revenue related to its new guidewire for TAVR procedure during the quarter.

The Company also reported other revenues of \$32,000 related to a new development project with OEM partners for the three-month period ended May 31, 2022, compared to \$19,000 for the same period in 2021.

Sales in the Industrial segment totalled \$874,000 for the three-month period ended May 31, 2022, compared to sales of \$713,000 for the same period in 2021. The slight increase is explained by a higher volume of orders compared to the same period last year.

For the three-month periods ended May 31, 2022, and 2021, price has been slightly reduced by GPO’s agreements.

The Company’s revenues are generated in U.S. dollars, Canadian dollars, euros, and British pounds; fluctuations in the exchange rate affect revenues and net loss. For the three-month period ended May 31, 2022, revenues were negatively affected by \$17,000 compared to the same period last year (sales were negatively impacted by \$750,000 for the three-month period ended May 31, 2021).

## **Gross Margin**

Information and analysis in this section do not take into consideration other revenues (\$32,000 for the three-month period ended May 31, 2022, and \$19,000 for the three-month period ended May 31, 2021).

Gross margin was \$5,106,000 for the three-month period ended May 31, 2022, compared to \$5,405,000 for the same period last year. The gross margin percentage decreased to 51% for the three-month period ended May 31, 2022, compared to 59% for the three-month period ended May 31, 2021. The decrease in gross margin is mainly explained by the end-of-life production for OptoWire 2, higher manufacturing costs during COVID-19 period and by the increased weighting of distributor sales over direct.

## **Administrative Expenses**

Administrative expenses were at \$1,886,000 and \$1,722,000, respectively, for the three-month periods ended May 31, 2022, and 2021. The increase is largely explained by higher headcount.

## **Sales and Marketing Expenses**

Sales and marketing expenses totalled \$3,639,000 for the three-month period ended May 31, 2022, an increase of \$1,323,000 over the \$2,316,000 reported during the same period in 2021. The increase is largely explained by higher headcount, commissions, publicity, in-person trade shows, subcontractors and travelling expenses related to the expansion of our direct sales force.

## **Research and Development Expenses**

Research and development expenses totalled \$2,322,000 for the three-month period ended May 31, 2022, an increase of \$732,000 over the \$1,590,000 reported during the same period in 2021. The increase is largely explained by the higher headcount dedicated to the development of new products and software in our medical segment. These additions aim at improving OpSens’ competitiveness and at achieving our growth objectives.

### Other Income

Other income was nil and \$121,000, respectively, for the three-month periods ended May 31, 2022, and 2021. The decrease is explained by a non-refundable contribution under the Canada Emergency Wage Subsidy (CEWS) program received last year.

### Financial Expenses

Financial expenses totalled \$75,000 for the three-month period ended May 31, 2022, compared to \$144,000 for the same period in 2021. The decrease in financial expenses is mainly explained by lower interest expenses of \$88,000.

### Loss on foreign currency

Loss on foreign currency totalled \$63,000 for the three-month period ended May 31, 2022, compared to \$327,000 for the same period in 2021. The decrease in loss on foreign currency expenses is mainly explained by more favorable exchange rate.

### Net Income (Loss)

As a result of the foregoing, net loss for the three-month period ended May 31, 2022, was \$2,856,000 compared to \$570,000 for the same period in 2021.

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION DATA

(In thousands of Canadian dollars)	As at May 31, 2022	As at August 31, 2021
	\$	\$
Current assets	41,035	49,783
Total assets	50,558	58,512
Current liabilities	6,993	7,395
Long-term liabilities	5,921	8,787
Shareholders' equity	37,644	42,330

Total assets as at May 31, 2022, were \$50,558,000 compared to \$58,512,000 as at August 31, 2021. The decrease is mainly related to lower cash and cash equivalents of \$10,533,000 following the repayment of the long-term loan with a Canadian financial institution and the increase in the operating expenses.

Current liabilities totalled \$6,993,000 as of May 31, 2022, compared to \$7,395,000 as of August 31, 2021. The decrease is mainly explained by a lower current portion of long-term debt of \$2,337,000. This is partly offset by an increase in accounts payable and accrued liabilities of \$1,800,000.

Long-term liabilities totalled \$5,921,000 as of May 31, 2022, compared to \$8,787,000 as of August 31, 2021, a decrease of \$2,866,000. The decrease is mainly explained by the repayment of the long-term loan with a Canadian financial institution. This is partly offset by the increase of the lease's liabilities.

## SUMMARY OF CONSOLIDATED QUARTERLY RESULTS

The summary below presents the periods in which OpSens published unaudited consolidated interim financial statements.

(Unaudited, in thousands of Canadian dollars, except for information per share)	Three-month period ended May 31, 2022	Three-month period ended February 28, 2022	Three-month period ended November 30, 2021	Three-month period ended August 31, 2021
	\$	\$	\$	\$
Revenues	10,076	8,100	8,096	8,066
Net loss for the period	(2,856)	(2,404)	(2,089)	(1,215)
Basic and diluted net loss per share	(0.03)	(0.02)	(0.02)	(0.01)

(Unaudited, in thousands of Canadian dollars, except for information per share)	Three-month period ended May 31, 2021	Three-month period ended February 28, 2021	Three-month period ended November 30, 2020	Three-month period ended August 31, 2020
	\$	\$	\$	\$
Revenues	9,233	8,829	8,336	7,576
Net income for the period	(570)	41	594	557
Basic and diluted net income per share	(0.01)	0.00	0.01	0.01

For the Medical sector, activities are generally slower in the fourth quarter due to the summer vacations of physicians.

## LIQUIDITY AND CAPITAL RESOURCES

As at May 31, 2022, the Company had cash and cash equivalents of \$28,030,000 compared to \$38,563,000 as at August 31, 2021. Of this amount as at May 31, 2022, \$24,912,000 were invested in highly-liquid, safe investments.

As at May 31, 2022, OpSens had a working capital of \$34,042,000, compared to \$42,388,000 as at August 31, 2021. The decrease in working capital is mainly related to lower cash and cash equivalents the following reimbursement of the long-term loan with a Canadian financial institution.

On February 25, 2021, the Company completed a bought deal public offering for aggregate gross proceeds of \$28,750,000. In connection with the offering, the Company issued a total of 15,972,222 shares at a price of \$1.80 per share. Transaction costs of the offering include underwriting fees of \$1,725,000 and other professional fees and miscellaneous fees of \$401,000 for total transaction costs of \$2,126,000.

The company intend the use of proceeds from the equity financing as follow:

(In Canadian dollars)	Use of funds as planned	Over-Allotment	Funds available to OpSens from equity financing	Actual use of funds as at May 31, 2022	Funds remaining to be used
	\$	\$	\$	\$	\$
Net proceeds from the issue, including the over-allotment option	22,874,000	3,750,000	26,624,000	15,854,222	10,769,778
<b>Use of proceeds</b>					
Sales and Marketing	7,000,000	-	7,000,000	7,000,000	-
Research and Development	8,000,000	-	8,000,000	7,671,596	328,404
Capital expenditures and production ramp-up	3,000,000	-	3,000,000	1,182,626	1,817,374
Working capital	4,874,000	3,750,000	8,624,000	-	8,624,000
<b>Total use of proceeds</b>	<b>22,874,000</b>	<b>3,750,000</b>	<b>26,624,000</b>	<b>15,854,222</b>	<b>10,769,778</b>

Under a loan agreement with a Canadian financial institution, the Company may receive a maximum amount of \$600,000. The loan bears interest at the prime rate plus 1.00% and is repayable in monthly instalments of \$16,667 and will mature in October 2024. The loan has a nine-months moratorium period without payment of principal following the date of the signature of the agreement. It is secured by a movable hypothec on the universality of the property, plant and equipment and intangible assets, present and future of the Company. On November 27, 2020, the Company received \$600,000 of this loan. Under this loan agreement, the Company is subject to certain covenants, which were met as of the date of this MD&A.

Based on its cash and cash equivalents position, OpSens has the financial resources necessary to maintain short-term operations, honour its commitments and support its anticipated growth and development activities. From a medium-term perspective, OpSens may need to raise additional financing by issuing equity securities or debt. From a long-term perspective, there is uncertainty about obtaining additional financing, given the risks and uncertainties identified in the “Risks and Uncertainties” section of the Annual Information Form. Changes in cash and cash equivalents will largely depend on the rate of revenue growth in upcoming quarters.

## SUMMARY OF CASH FLOWS

(In thousands of Canadian dollars)	Three-month period ended	Three-month period ended	Nine-month period ended	Nine-month period ended
	May 31, 2022	May 31, 2021	May 31, 2022	May 31, 2021
	\$	\$	\$	\$
Operating activities	(2,483)	836	(4,737)	2,452
Investing activities	(390)	(263)	(729)	(757)
Financing activities	(12)	(1,004)	(5,031)	26,371
Effect of foreign exchange rate changes on cash and cash equivalents	(33)	(104)	(36)	(172)
<b>Net change in cash and cash equivalents</b>	<b>(2,918)</b>	<b>(535)</b>	<b>(10,533)</b>	<b>27,894</b>

### Operating Activities

For the three-month period ended May 31, 2022, cash flows used by our operating activities were \$2,483,000 compared to cash flows generated of \$836,000 for the same period last year. The increase in cash flows used by our operating activities is mainly explained by a negative variance of EBITDAO, as explained previously and by a negative variance of changes in non-cash operating working capital items related to trade and other receivables. This is partly offset by a positive variance of changes in non-cash operating working capital items related to accounts payable and accrued liabilities.

For the nine-month period ended May 31, 2022, cash flows used by our operating activities were \$4,737,000 compared to cash flows generated of \$2,452,000 for the same period last year. The increase in cash flows used by our operating activities is mainly explained by a negative variance of EBITDAO, as explained previously.

### Investing Activities

For the three-month period ended May 31, 2022, cash flows used by our investing activities reached \$390,000 compared to \$263,000 for the same period in 2021. The increase in cash flows used is mainly explained by higher acquisition of intangible assets for the Medical sector.

For the nine-month period ended May 31, 2022, cash flows used by our investing activities reached \$729,000 compared to \$757,000 for the same period in 2021. The decrease in cash flows used is mainly explained by higher interest received. This is partly offset by an increase of acquisition of intangible assets for the Medical sector.

### Financing Activities

For the three-month period ended May 31, 2022, cash flows used by our financing activities reached \$12,000 compared to \$1,004,000 for the same period in 2021. The decrease is mainly explained by lower reimbursement of long-term debt and by lower transactions cost attributable to the issuance of common shares.

For the nine-month period ended May 31, 2022, cash flows used by financing activities reached \$5,031,000 compared to cash flows generated of \$26,371,000 for the same period in 2021. The variation is mainly explained by completion of a bought deal public offering in February 2021. This is partly offset by the repayment of the long-term loan with a Canadian financial institution in September 2021.

## INFORMATION BY REPORTABLE SEGMENTS

### Segmented Information

The Company is organized into two segments: Medical and Industrial.

Medical segment: in this segment, OpSens focuses mainly on physiological measurement such as FFR and dPR in the coronary artery disease market but also supplies a wide range of miniature optical sensors to measure pressure and temperature to be used in a wide range of applications that can be integrated in other medical devices. This also includes other revenues related to its optical sensor technology.

Industrial segment: in this segment, OpSens develops, manufactures, and installs innovative fibre optic sensing solutions for critical and demanding industrial applications.

The principal factors employed in the identification of the two segments include the Company's organizational structure, the nature of the reporting lines to the President and Chief Executive Officer and the structure of internal reporting documentation such as management accounts and budgets.

The same accounting policies are used for both reportable segments. Operations are carried out in the normal course of business and are measured at the exchange amount, which approximates prevailing prices in the markets.

	Three-month period ended May 31,					
	2022			2021		
	Medical	Industrial	Total	Medical	Industrial	Total
	\$	\$	\$	\$	\$	\$
External sales	9,202,825	873,449	10,076,274	8,520,376	712,517	9,232,893
Internal sales	42,041	73,947	115,988	36,042	91,726	127,768
Gross margin	4,553,428	584,279	5,137,707	4,906,684	517,004	5,423,688
Depreciation of property, plant and equipment and right-of-use assets	346,455	50,625	397,080	342,323	54,471	396,794
Amortization of intangible assets	61,392	4,641	66,033	56,371	3,190	59,561
Other income	-	-	-	-	121,097	121,097
Financial expenses	317	74,815	75,132	63,714	80,358	144,072
Loss on foreign currency translation	43,192	19,969	63,161	287,298	39,513	326,811
Current income tax expense	9,066	-	9,066	16,110	-	16,110
Net income (loss)	(2,928,571)	72,245	(2,856,326)	(566,769)	(3,705)	(570,474)
Acquisition of property, plant and equipment	315,987	5,413	321,400	250,720	40,014	290,734
Additions to intangible assets	130,940	47,078	178,018	33,423	-	33,423
Segment assets	47,971,368	2,586,281	50,557,649	57,409,323	2,770,152	60,179,475
Segment liabilities	12,053,847	859,978	12,913,825	16,099,694	1,097,092	17,196,786

	Nine-month period ended May 31,					
	2022			2021		
	Medical	Industrial	Total	Medical	Industrial	Total
	\$	\$	\$	\$	\$	\$
External sales	23,675,936	2,595,510	26,271,446	23,706,840	2,691,572	26,398,412
Internal sales	78,765	195,656	274,421	108,132	179,595	287,727
Gross margin	11,786,472	1,638,847	13,425,319	12,749,308	1,915,310	14,664,618
Depreciation of property, plant and equipment and right-of-use assets	1,010,739	160,517	1,171,256	1,030,331	127,260	1,157,591
Amortisation of intangible assets	181,404	12,033	193,437	161,122	8,455	169,577
Other income	-	-	-	445,506	275,895	721,401
Financial expenses	88,474	222,643	311,117	252,855	242,777	495,632
Loss on foreign currency translation	101,747	18,350	120,097	400,927	82,943	483,870
Current income tax expense	43,362	-	43,362	34,814	-	34,814
Net income (loss)	(7,518,230)	168,283	(7,349,947)	(581,622)	646,046	64,424
Acquisition of property, plant and equipment	571,509	13,426	584,935	504,172	41,047	545,219
Additions to intangible assets	267,733	58,416	326,149	207,685	19,785	227,470
Segment assets	47,971,368	2,586,281	50,557,649	57,409,323	2,770,152	60,179,475
Segment liabilities	12,053,847	859,978	12,913,825	16,099,694	1,097,092	17,196,786

*Information by geographic segment*

	Three-month periods ended May 31,		Nine-month periods ended May 31,	
	2022	2021	2022	2021
	\$	\$	\$	\$
Revenue by geographic segment				
United States	4,161,505	3,552,305	10,936,497	9,706,591
Japan	2,200,817	1,638,755	4,363,470	5,745,345
Canada	890,196	857,260	2,512,836	2,447,747
Other*	2,823,756	3,184,573	8,458,643	8,498,729
	10,076,274	9,232,893	26,271,446	26,398,412

\* Comprised of revenues generated in countries for which amounts are individually not significant.

Revenues are attributed to the geographic segment based on the clients' location.

Non-current assets, which include property, plant and equipment, intangible assets, and right-of-use assets, are located in Canada, except non-current assets located in United States of \$179,165 as at May 31, 2022 (\$19,440 as at August 31, 2021).

During the three-month period ended May 31, 2022, revenues from two clients from the Medical's reportable segment represented individually more than 10% of the total revenues of the Company, i.e. 22% and 21% (20% and 18% for the three-month period ended May 31, 2021).

During the nine-month period ended May 31, 2022, revenues from two clients from the Medical's reportable segment represented individually more than 10% of the total revenues of the Company, i.e. 24% and 16% (22% and 19% for the nine-month period ended May 31, 2021).

#### *Medical Segment*

Information and analysis in this section for revenue and gross margin do not take into consideration other revenues (\$32,000 for the three-month period ended May 31, 2022, and \$19,000 for the three-month period ended May 31, 2021).

For the three-month period ended May 31, 2022, sales from the Medical segment were \$9,170,000 compared to \$8,501,000 for the three-month period ended May 31, 2021, an increase of \$669,000. The increase is explained by higher coronary artery disease product sales of \$397,000 and by higher OEM medical sales of \$254,000.

Gross margin was \$4,522,000 for the three-month period ended May 31, 2022, compared to \$4,888,000 for the three-month period ended May 31, 2021, a decrease of \$366,000. The gross margin percentage decreased at 49% for the three-month period ended May 31, 2022, compared to 57% for three-month period ended May 31, 2021. The decrease in gross margin percentage is mainly explained by the end-of-life production of OptoWire 2, higher manufacturing costs during COVID-19 period and by the increased weighting of distributor sales over direct.

Net loss for the medical segment was \$2,929,000 for the three-month period ended May 31, 2022, compared to \$567,000 for the same period last year. The increase in net loss is mainly explained by higher operating expenses in the current period.

Working capital for the Medical segment as at May 31, 2022, was \$32,688,000 compared to \$41,372,000 as at August 31, 2021. The decrease of \$8,684,000 is mainly explained by lower cash and cash equivalents of \$10,583,000. This is partly offset by lower current portion of long-term debt of \$2,337,000.

#### *Industrial Segment*

For the three-month period ended May 31, 2022, external sales from the Industrial segment were \$874,000 compared to \$713,000 for the three-month period ended May 31, 2021, an increase of \$161,000 mostly explained by a higher volume of orders compared to the same period last year.

Gross margin was \$584,000 for the three-month period ended May 31, 2022, compared to \$517,000 for the same period in 2021, an increase of \$67,000. The gross margin percentage slightly decreased from 64% for the three-month period ended May 31, 2021, to 62% for the three-month period ended May 31, 2022.

Net income for the Industrial segment was \$72,000 for the three-month period ended May 31, 2022, compared to a net loss of \$4,000 for the three-month period ended May 31, 2021. The increase in net income is mainly explained by the increase in the gross margin.

Working capital for the Industrial segment as at May 31, 2022, was \$1,354,000 compared to \$1,016,000 as at August 31, 2021. The increase is mainly explained by higher trade and other receivables of \$251,000.

## **NINE-MONTH PERIODS ENDED MAY 31, 2022, AND MAY 31, 2021**

### **Revenues**

Revenues totalled \$26,271,000 for the nine-month period ended May 31, 2022, compared to \$26,399,000 for the corresponding period in 2021, a decrease of \$127,000.

### **Gross Margin**

Information and analysis in this section do not take into consideration other revenues (\$197,000 for the nine-month period ended May 31, 2022, and \$56,000 for the nine-month period ended May 31, 2021, respectively).

Gross margin was \$13,228,000 for the nine-month period ended May 31, 2022, compared to \$14,609,000 for the same period last year. The gross margin percentage decreased to 51% for the nine-month period ended May 31, 2022, compared to 55% for the nine-month period ended May 31, 2021. The decrease in gross margin is mainly explained by the end-of-life production of OptoWire 2 and higher manufacturing costs during COVID-19 period.

### **Administrative Expenses**

Administrative expenses were at \$5,950,000 and \$4,679,000, respectively, for the nine-month period ended May 31, 2022, and the nine-month period ended May 31, 2021. The increase is largely explained by higher headcount, communication fees, and stock option expenses.

### **Sales and Marketing Expenses**

Sales and marketing expenses totalled \$8,237,000 for the nine-month period ended May 31, 2022, an increase of \$2,779,000 over the \$5,458,000 reported during the same period in 2021. The increase is largely explained by higher headcount, commissions, trade shows, subcontractors and travelling expenses when compared to last year related to the expansion of our direct sales force.

### **Research and Development Expenses**

Research and development expenses totalled \$6,114,000 for the nine-month period ended May 31, 2022, an increase of \$1,944,000 over the \$4,170,000 reported during the same period in 2021. The increase is largely explained by the higher headcount dedicated to the development of new products and software in our medical segment. These additions aim at improving OpSens' competitiveness and at achieving our growth objectives.

### **Other Income**

Other income was nil and \$721,000, respectively, for the nine-month periods ended May 31, 2022, and May 31, 2021. The decrease is explained by a non-refundable contribution under the CEWS program received last year.

### **Financial Expenses**

Financial expenses totalled \$311,000 for the nine-month period ended May 31, 2022, compared to \$496,000 for the same period in 2021. The decrease in financial expenses is mainly explained by lower interest expenses of \$229,000 and a higher interest revenue of \$75,000. This is partly offset by higher banking fees of \$114,000.

### **Loss on foreign currency**

Loss on foreign currency totalled \$120,000 for the nine-month period ended May 31, 2022, compared to \$484,000 for the same period in 2021. The decrease in loss on foreign currency expenses is mainly explained by more favorable exchange rate.

## Net Income (Loss)

As a result of the foregoing, net loss for the nine-month period ended May 31, 2022, was \$7,350,000 compared to net income of \$64,000 for the same period in 2021.

## PRODUCT DEVELOPMENT

	Three-month periods ended May 31,		Nine-month periods ended May31,	
	2022	2021	2022	2021
	\$	\$	\$	\$
SavvyWire	340,000	420,000	915,000	1,122,000
R&D expenses	1,982,000	1,170,000	5,199,000	3,048,000
	2,322,000	1,590,000	6,114,000	4,170,000
As a percentage of revenues	23%	17%	23%	16%

OpSens is currently developing the SavvyWire, a product targeting the market of structural cardiology, one of the fastest growing segments of cardiology. The SavvyWire is developed specifically for TAVR. It is anticipated to become the first guidewire intended to both deliver a valvular prosthesis while allowing continuous hemodynamic pressure measurement during the procedure.

OpSens has successfully completed the planned in-human clinical study on twenty patients required to complete regulatory filing. Regulatory filing for Canada, United States and Europe were done during Q2 2022. SavvyWire was approved in Canada in Q3 2022. Product launch of the SavvyWire will be deployed as authorizations are received.

Expenses related to the development of the SavvyWire since the beginning of the project total \$3,183,000.

## INFORMATION ON SHARE CAPITAL

For the nine-month period ended May 31, 2022, the Company granted to some employees and directors a total of 1,815,750 stock options with an average exercise price of \$2.41, cancelled 488,875 stock options with an exercise price of \$1.38, 1,370,000 stock options with an average exercise price of \$1.30 were exercised, and 86,000 stock options with an exercise price of \$1.55 expired.

For the nine-month period ended May 31, 2021, the Company granted to some employees and directors a total of 1,582,500 stock options with an average exercise price of \$1.42, cancelled 345,375 stock options with an exercise price of \$0.99, 563,000 stock options with an average exercise price of \$1.07 were exercised, and 299,375 stock options with an exercise price of \$1.20 expired.

As at July 13, 2022, the following components of shareholders' equity are outstanding:

Common shares	108,770,539
Stock options	6,711,875
<u>Securities on a fully diluted basis</u>	<u>115,482,414</u>

No dividend was declared per share for each share class.

## **CAPACITY TO PRODUCE RESULTS**

As discussed in the section “LIQUIDITY AND CAPITAL RESOURCES”, the Company has the required financial resources for its short-term operations, to fulfill its commitments, to support its growth plan and for the development of its activities. On a mid-term perspective, it is possible that additional financing, through the issuance of shares or debt financing or any other means of financing, might be required.

From the human resources’ perspective, there are no vacancies in the major executive positions within the Company. However, additional technical and production personnel as well as sales and marketing personnel will be required to support the expected growth. Considering the employment market in Canada, the United States and Europe, the Company is confident in its capacity to recruit qualified human resources in a timely fashion.

Regarding the strategy on corporate executive compensation, it is oriented toward creating long-term value for the shareholders. Several corporate executives hold an important share and share-purchase option position, with rights to be acquired over a four-year period to align shareholders’ interest with corporate executives’ interest. This long-term vision stimulates innovation and the development of recurring revenues.

## **CHANGES IN INTERNAL CONTROLS OVER FINANCIAL REPORTING (ICFR)**

In accordance with the requirements of National Instrument 52-109–Certification of Disclosure in Issuers’ Annual and Interim Filings (“NI 52-109”), the Company has filed certificates signed by the Chief Executive Officer and the Chief Financial Officer that, among other things, report on the design of disclosure controls and procedures and the design of internal controls over financial reporting. There have been no changes in the Company’s ICFR during the three-month period ended May 31, 2022, that have materially affected, or are reasonably likely materially affecting its ICFR.

## **RISK FACTORS**

The Company operates in an industry that contains various risks and uncertainties. Additional risks and uncertainties not presently known by the Company, or which the Company deems to be currently insignificant, may impede the Company’s performance. The materialization of one of the risks could harm the Company’s activities and have significant negative impacts on its financial situation and its operating results. In that case, the Company’s stock price could be affected.

There are other important risks which management believes could impact the Company’s business. For information on risks and uncertainties, please also refer to the “Risk Factors” section of our most recent Annual Information Form.

## **OFF-BALANCE SHEET ARRANGEMENTS**

As of May 31, 2022, the Company was not the primary beneficiary in Special Purpose Entities and there were no off-balance sheet arrangements.

## **OTHER INFORMATION**

Updated information on the Company can be found on the SEDAR Web site at <http://www.sedar.com>.

On behalf of management,  
Chief Financial Officer and Corporate Secretary

*(s) Robin Villeneuve, CPA*

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July 13, 2022