# MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE THREE-MONTH PERIOD ENDED NOVEMBER 30, 2018

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 period ended November 30, 2018 in comparison with the corresponding period ended November 30, 2017. In this Management’s Discussion and Analysis (MD&A), Opsens, “the Company”, “we”, “us” and “our” mean Opsens Inc. and its subsidiary. 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, 2018 and 2017, 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 January 10, 2019. 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 January 10, 2019 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.

## OVERVIEW

The Company's primary focus is the measurement of Fractional Flow Reserve (FFR) in the interventional cardiology market. This measurement is mainly used for the diagnosis of blockages in the coronary arteries and has begun to extend to other peripheral specialties. Opsens offers an optical guidewire (OptoWire) to measure pressure to diagnose and improve clinical outcomes in patients with coronary heart disease. Opsens also operates in the industrial sector through its wholly-owned subsidiary Opsens Solutions Inc. (Solutions). Solutions develops, manufactures and installs innovative measurement solutions using fiber optic sensors for critical and demanding industrial applications.

Opsens owns nine patents and has three patents pending to protect technologies in its medical and industrial sectors.

## SECTORS OF ACTIVITY

**In the medical field**, Opsens markets the OptoWire and the OptoMonitor for interventional cardiology to provide cardiologists with an optimized pressure guidewire to navigate coronary arteries and cross blockages with ease while measuring intracoronary blood pressure. This procedure is called measurement of FFR or more broadly, physiology.

Opsens has obtained the required commercial approvals for the OptoWire and OptoMonitor in the world's largest markets, namely the United States, Europe, Japan and Canada. Combined, these markets represent approximately 85% of the global market for FFR products. Furthermore, Opsens developed a product that allows physicians to diagnose the coronary-artery blockages at rest. This new product, known as dPR, is Opsens' resting pressure measurement method. It is available through the OptoMonitor and works in combination with the OptoWire. Opsens' dPR is already being marketed in Japan and Canada while the Company is awaiting regulatory approvals for the U.S. Recently, Opsens has been granted the CE marking for its dPR.

Opsens has established a direct sales force in the U.S. 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.

**In the industrial sector**, Opsens' expertise, technology and products meet the needs of multiple markets, including aerospace, semiconductor, geotechnical, structural, oil and gas, mining, laboratories 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.

## MARKET OVERVIEW

**In the medical field**, particularly in interventional cardiology, FFR represents a significant and growing opportunity for the Company. In recent years, the prevalence of coronary heart disease has increased rapidly. In the AHA report, "Heart Disease and Stroke Statistics - 2017", which is based on health data compiled in more than 190 countries, coronary heart disease is the leading cause of death worldwide 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 these diseases is a significant burden to society. The benefits of FFR were demonstrated in various clinical studies such as FAME I and FAME II published in 2009 and 2012, respectively in the New England Journal of Medicine. The FAME I study showed that the FFR-guided treatment rather than the standard angiography alone led to a reduction in mortality, myocardial infarction, readmission for percutaneous coronary intervention and coronary bypass by about 30% after a year. Several reports have also shown inaccurate diagnoses that can lead to misuse or inappropriate use of "stents."

The measurement of FFR has been shown to be more accurate and now holds the highest recommendation from the European Society of Cardiology (Class IA).

In the United States, support for the increasing use of FFR continues to grow. In March 2017, the appropriate use criteria ("AUC") for stable 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 the expand use of FFR technologies. Payers, including Medicare, use the AUC to help formulate their repayment criteria.

Recently, in Japan, the Ministry of Health, Labour and Welfare (MHLW) 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 the medical fees and established a requirement to assess functional ischemia (blockage of arteries) prior to treatment.

These recent developments contribute to the steady growth of the FFR market. According to management and industry sources estimates (1), this market exceeds US$500 million worldwide in 2018 and is expected to exceed US$1 billion annually in the medium term.



(1) Opsens FFR Market Calculations based on **R. Scott Huennekens, "Volcano's CEO Hosts NASDAQ Analyst Day"** ***TRANSCRIPT*** **p.5** ***(2013-03-7)***, JOHN T. DAHLDORF, "Volcano's Annual Report 2012" and St. Jude Medical 2015 – Investors Conference , February 6, 2015.

**In the industrial field**, the vast market presents numerous opportunities. The Company focuses mainly on the following markets:

- Structural Integrity Monitoring Market: Opportunities are mainly related to stress, load and displacement measures. The applications are in geotechnics, civil engineering, energy and oil and gas. The new industrial versions of strain sensors such as the extensometer and the load cell are the main flagship products for these applications;
- Pressure Monitoring Solutions Market: Opportunities are mainly related to absolute and differential pressure measurements. Pressure measurements are at the heart of many industrial applications in energy, geotechnics, oil and gas, and aerospace. The new industrial versions of the pressure sensor and the latest of a differential pressure sensor are the main flagship products for these applications;
- Traditional Niche Applications Market: Opsens is currently engaged in niche applications such as semiconductor, electro-explosive devices (EEDs), Steam Assisted Gravity Drainage (SAGD) in Western Canada, and in laboratories (special projects and customized products).

**COMPETITION**

**In the medical sector**, the FFR measurement market has five competitors and is currently dominated by two major players who commercialize a first-generation electrical technology. Competition is based on technological advantages, brand recognition, customer service, marketing support and price.

**In the industrial sector**, there are significant number of competitors in the field. This competition is based primarily on technological advantages. Our direct competition is made up of both open and closed-end companies with a global presence.

## CORPORATE GROWTH STRATEGY

Opsens' growth strategy is to become a key player in the medical sector, particularly in the field of interventional cardiology, focusing on the measurement of FFR, 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 FFR market

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

- Direct Sales Force: Opsens has established a sales team, hiring a seasoned staff with solid expertise in interventional cardiology. This sales force has been implemented to increase Opsens’ market and commercialization penetration in the United States and Canada;
- Distributor Sales Force: Opsens has signed distribution agreements in Europe, the Middle East, Japan and Asia. These agreements allow Opsens to focus on market penetration with leading business partners in their respective markets.

The FFR market has started focusing on new measurements performed at rest. These measurements require greater accuracy and constant and repeated guidewire performance over time. With its second-generation optical sensor, the Company is convinced that there will be a growing interest with the OptoWire’s recognized features that produce:

- Better design features and product specifications for improved mechanical performances (e.g., torque capacity and handling);
- A no-drift[(2)] measurement technology for improved reliability of FFR measurements, essential in cardiologists' decision-making. Competing FFR technologies have higher drift levels;
- Better connectivity as the OptoWire is insensitive to blood contamination. It can be easily reconnected without compromising accuracy of the measurement.

- Clinical Data

The Company is presently undertaking and planning to conduct clinical studies. The objective of these studies is to demonstrate the superiority of Opsens’ FFR products.

- 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 FFR products and develop new fiber optic sensing technologies for physiology assessment that address other invasive 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.

In other medical products, 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 also aims to partner with key players in the industry, such as its partnership with Abiomed inc. (Abiomed), for the use of its miniature sensors and technology.



(2) Per 60601-2-34 ed3

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

- Development of a sales and distribution network Opsens Solutions has set up a network development strategy to increase its visibility in the various markets;

- Target Market Potential markets for Opsens Solutions' technology are very broad—targeting only specific markets such as semiconductors, aerospace and laboratories. These are markets where Opsens' products offer unique advantages over its competitors;

- Innovation Opsens Solutions continually invests in innovations of its products, so they can offer unique advantages over its competitors. For example, the Company's optical strain and pressure sensors have received the attention of major players in the aerospace industry because they require no shielding or grounding and because of their ease of deployment.

## NON-IFRS FINANCIAL MEASURES - EBITDACO

The Company quarterly reviews net loss and Earnings Before Interest, Taxes, Depreciation, Amortization, Change in fair value of embedded derivative and Stock-based compensation costs (EBITDACO). EBITDACO 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. EBITDACO is defined by the Company as the addition of net loss, financial expenses (revenues), depreciation and amortization, change in fair value of embedded derivative and stock-based compensation costs. The Company uses EBITDACO 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 them to see the Company's results through the eyes of management, and to better understand its historical and future financial performance.

### Reconciliation of EBITDACO to Net Loss

| (In thousands of Canadian dollars) | **Three-month period ended November 30, 2018** | **Three-month period ended November 30, 2017** |
|---|---|---|
| | **$** | **$** |
| Net earnings (loss) | 1,092 | (936) |
| Financial revenues | (59) | (26) |
| Amortization of property, plant and equipment | 201 | 197 |
| Amortization of intangible assets | 23 | 26 |
| Change in fair value of embedded derivative | - | 501 |
| EBITDAC | 1,257 | (238) |
| Stock-based compensation costs | 109 | 193 |
| **EBITDACO** | 1,366 | (45) |

The positive variance of EBITDACO for the three-month period ended November 30, 2018 is mainly explained by the increase in revenues in the medical sector and by licensing revenue related to the Abiomed agreement. This was partly offset by higher administrative, sales and marketing and research and development expenses as explained further below.

## SELECTED CONSOLIDATED FINANCIAL DATA

| (In thousands of Canadian dollars, except for information per share) | **Three-month period ended November 30, 2018** | **Three-month period ended November 30, 2017** |
|---|---|---|
| | **$** | **$** |
| **Revenues** | | |
| Sales | | |
| Medical | 6,207 | 4,711 |
| Industrial | 594 | 625 |
| | 6,801 | 5,336 |
| Licensing agreement | 2,302 | 1,028 |
| | 9,103 | 6,364 |
| Cost of sales | 3,462 | 3,028 |
| **Gross margin** | 5,641 | 3,336 |
| Gross margin percentage | 62% | 52% |
| **Expenses (revenues)** | | |
| Administrative | 1,112 | 729 |
| Sales and marketing | 2,423 | 2,197 |
| Research and development | 1,073 | 871 |
| Financial revenues | (59) | (26) |
| Change in fair value of embedded derivative | - | 501 |
| | 4,549 | 4,272 |
| **Net earnings (loss) and comprehensive earnings (loss)** | 1,092 | (936) |
| **Basic and diluted net earnings (loss) per share** | 0.01 | (0.01) |

### Revenues

The Company reported revenues of $9,103,000 for the three-month period ended November 30, 2018 compared to revenues of $6,364,000 for the corresponding period in 2017, an increase of $2,739,000 or 43%.

Sales in the medical sector totalled $6,207,000 for the three-month period ended November 30, 2018 compared to sales of $4,711,000 for the same period in 2017. The increase in medical sector revenues is mainly explained by a higher number of OptoWire shipped when compared to the same period last year. FFR sales totalled $4,680,000 for the three-month period ended November 30, 2018, an increase of $1,321,000 compared to the $3,359,000 reported for the same period last year.

Sales in the industrial sector were stable at $594,000 for the three-month period ended November 30, 2018 compared to sales of $625,000 for the same period in 2017.

For the period ended November 30, 2018 and 2017, pricing fluctuations did not have a significant impact on revenues.

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 November 30, 2018, revenues were positively affected by $247,000 compared to the same period last year (sales were negatively impacted by $191,000 for the three-month period ended November 30, 2017).

As at November 30, 2018, Opsens' total backlog of orders amounted to $5,443,000 ($3,955,000 as at November 30, 2017).

**Gross Margin**

Information and analysis in this section do not take into consideration licensing revenues ($2,302,000 for the three-month period ended November 30, 2018 and $1,028,000 for the three-month period ended November 30 2017, respectively).

Gross margin was $3,339,000 for the three-month period ended November 30, 2018 compared to $2,308,000 for the same period last year. The gross margin percentage increased from 43% for the three-month period ended November 30, 2017 to 49% for the three-month period ended November 30, 2018. The increase in gross margin is mainly explained by higher sales from our FFR medical products line, as previously explained. The increase in gross margin percentage reflects a higher sales volume and the related benefits of scale combined with enhanced productivity.

**Administrative Expenses**

Administrative expenses were $1,112,000 and $729,000, respectively, for the three-month period ended November 30, 2018 and 2017. The increase is mainly explained by higher headcount and professional fees. Also, we reversed an allowance for doubtful accounts related to a client in the industrial sector during the same period last year.

**Sales and Marketing Expenses**

Sales and marketing expenses totalled $2,423,000 for the three-month period ended November 30, 2018, an increase of $226,000 over the $2,197,000 reported during the same period in 2017. The increase is largely explained by higher commissions, tradeshows and subcontractors' expenses when compared to last year due to the expansion of Opsens' direct sales presence for its FFR products in the United States and EMEA. This was partly offset by a lower headcount.

**Research and Development Expenses**

Research and development expenses totalled $1,073,000 for the three-month period ended November 30, 2018, an increase of $202,000 over the $871,000 reported during the same period in 2017. The increase is mainly explained by higher supplies and subcontractors for our FFR activities.

**Financial Revenues**

Financial revenues reached $59,000 for the three-month period ended November 30, 2018 compared to $26,000 for the same period in 2017. The increase in financial revenues is explained by lower interest expenses of $18,000 on long-term debt and by a more favorable exchange rate resulting in a positive impact of $15,000.

**Change in Fair Value of the Embedded Derivative**

The change in fair value of embedded derivative comes from the change in fair market value of the conversion option component of the convertible debenture. The convertible debenture contained a cash settlement feature, which under IAS 32, *Financial Instruments: Presentation*, was accounted for as a compound financial instrument with a debt component and a separate embedded derivative representing the conversion option. Both the debt and embedded derivative components of this compound financial instrument were measured at fair value on initial recognition. The debt component was subsequently accounted for at amortized cost using the effective interest rate method. The embedded derivative was subsequently measured at fair value at each reporting date with gains and losses in fair value recognized through profit or loss. During the three-month period ended November 30, 2017, an expense of $501,000 was recorded in the consolidated statements of loss and comprehensive loss. On November 16, 2017 the holder of the debenture exercised its conversion option.

**Net Earnings (Loss)**

As a result of the foregoing, net earnings for the three-month period ended November 30, 2018 was $1,092,000 compared to a net loss of 936,000 for the same period in 2017.

## CONSOLIDATED STATEMENTS OF FINANCIAL POSITION DATA

| (In thousands of Canadian dollars) | As at November 30, 2018 | As at August 31, 2018 |
|---|---|---|
| | $ | $ |
| Current assets | 21,704 | 19,785 |
| Total assets | 25,545 | 23,586 |
| Current liabilities | 4,293 | 3,438 |
| Long-term liabilities | 1,333 | 1,475 |
| Shareholders' equity | 19,919 | 18,673 |

Total assets as at November 30, 2018 were $25,545,000 compared to $23,586,000 as at August 31, 2018. The increase is mainly related to higher cash and cash equivalents of $815,000 and by higher trade and other receivables of $1,719,000 following the increase in revenues in the medical sector. This is partly offset by lower inventory of $492,000 and by lower prepaid expenses of $179,000.

Current liabilities totalled $4,293,000 as at November 30, 2018 compared to $3,438,000 as at August 31, 2018. The increase is mainly explained by higher accounts payables and accrued liabilities of $886,000.

Long-term liabilities totalled $1,333,000 as at November 30, 2018 compared to $1,475,000 as at August 31, 2018, a decrease of $142,000. The decrease is mainly explained by a lower portion of long-term debt of $118,000.

## SUMMARY OF CONSOLIDATED QUARTERLY RESULTS

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

| (Unaudited, in thousands of Canadian dollars, except for information per share) | Three-month period ended November 30, 2018 | Three-month period ended August 31, 2018 | Three-month period ended May 31, 2018 | Three-month period ended February 28, 2018 |
|---|---|---|---|---|
| | $ | $ | $ | $ |
| Revenues | 9,103 | 5,866 | 6,398 | 5,442 |
| Net earnings (loss) for the period | 1,092 | (1,501) | (846) | (1,267) |
| Basic and diluted net earnings (loss) per share | 0.01 | (0.02) | (0.01) | (0.01) |

| (Unaudited, in thousands of Canadian dollars, except for information per share) | Three-month period ended November 30, 2017 | Three-month period ended August 31, 2017 | Three-month period ended May 31, 2017 | Three-month period ended February 28, 2017 |
|---|---|---|---|---|
| | $ | $ | $ | $ |
| Revenues | 6,364 | 4,307 | 4,892 | 4,808 |
| Net loss for the period | (936) | (1,153) | (1,842) | (1,001) |
| Basic and diluted net loss per share | (0.01) | (0.02) | (0.02) | (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 November 30, 2018, the Company had cash and cash equivalents of $11,702,000 compared to $10,887,000 as at August 31, 2018. Of this amount as at November 30, 2018, $10,392,000 was invested in highly-liquid, safe investments. As at November 30, 2018, Opsens had a working capital of $17,411,000, compared to $16,347,000 as at August 31, 2018. The increase in working capital is mainly related to higher trade and other receivables.

On February 6, 2018, the Company entered into a loan agreement of $213,840, net of transaction costs of $2,160, with Investissement Québec. This loan bears interest at prime rate plus 0.25%, is payable in monthly instalments of $4,500, and will be maturing in February 2022. This loan is secured by a movable hypothec on the Company's assets. Under this loan agreement, the Company is subject to certain covenants with respect to maintaining certain financial ratio, which were met as of the date of this MD&A.

The Company has an authorized line of credit for a maximum amount of $200,000, $50,000 of which is available at all times and does not take into consideration the margining. When using the line of credit in an amount varying from $50,000 and $100,000, the available credit is limited to an amount that is equal to 75% of Canadian accounts receivable and 65% of foreign accounts receivable plus 50% of inventories of raw materials and finished goods. If the amount used exceeds $100,000, the credit available is limited to an amount equal to 75% of Canadian accounts receivable and 90% of insured foreign accounts receivable plus 50% of inventories of raw materials and finished goods. This line of credit bears interest at the financial institution's prime rate plus 2% and is repayable on a weekly basis by $5,000 tranches. It is secured by a first-rank movable hypothec for an amount of $750,000 on the universality of receivables and inventories.

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 and/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 November 30, 2018 | Three-month period ended November 30, 2017 |
|---|---|---|
| | $ | $ |
| Operating activities | 1,173 | 962 |
| Investing activities | (286) | (68) |
| Financing activities | (84) | (94) |
| Effect of foreign exchange rate changes on cash and cash equivalents | 12 | 37 |
| **Net change in cash and cash equivalents** | 815 | 837 |

**Operating Activities**

Cash flows generated by our operating activities for the three-month period ended November 30, 2018 were $1,173,000 compared to $962,000 for the same period last year. The increase in cash flows generated by our operating activities is mainly explained by a positive variance of EBITDACO as explained previously. This is partly offset by a negative changes in non-cash operating working capital items mostly related to trade and other receivables due to the increase in revenues in the medical sector.

**Investing Activities**

For the three-month period ended November 30, 2018, cash flows used by our investing activities reached $286,000 compared to $68,000 for the three-month period ended November 30, 2017. The increase is mainly explained by the fact that we didn’t receive any tax credit for the acquisition of property, plant and equipment during the three-month period ended November 30, 2018.

**Financing Activities**

For the three-month period ended November 30, 2018, cash flows used by financing activities were stable at $84,000 compared to $94,000 for the three-month period ended November 30, 2017.

## 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 the measure of FFR in interventional cardiology 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 others medical devices. This also includes licensing revenue 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 reflected in this note 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 November 30, 2018 | | | Three-month period ended November 30, 2017 | | |
|---|---|---|---|---|---|---|
| | Medical | Industrial | Total | Medical | Industrial | Total |
| | $ | $ | $ | $ | $ | $ |
| External sales | 8,508,716 | 594,022 | 9,102,738 | 5,738,978 | 624,625 | 6,363,603 |
| Internal sales | - | 26,941 | 26,941 | - | 42,244 | 42,244 |
| Gross margin | 5,263,099 | 378,091 | 5,641,190 | 2,913,447 | 422,757 | 3,336,204 |
| Amortization of property, plant and equipment | 187,558 | 13,456 | 201,014 | 177,715 | 19,535 | 197,250 |
| Amortization of intangible assets | 19,597 | 3,815 | 23,412 | 22,369 | 3,691 | 26,060 |
| Financial expenses (revenues) | (124,630) | 65,137 | (59,493) | (79,037) | 53,228 | (25,809) |
| Change in fair value of embedded derivative | - | - | - | 501,250 | - | 501,250 |
| Net earnings (loss) | 1,115,556 | (23,242) | 1,092,314 | (1,078,493) | 142,929 | (935,564) |
| Acquisition of property, plant and equipment | 237,912 | 9,205 | 247,117 | 282,372 | 2,827 | 285,199 |
| Additions to intangible assets | 32,032 | 220 | 32,252 | 17,616 | - | 17,616 |
| Segment assets | 23,942,927 | 1,602,039 | 25,544,966 | 25,853,278 | 1,610,712 | 27,463,990 |
| Segment liabilities | 5,330,128 | 296,188 | 5,626,316 | 5,566,700 | 213,814 | 5,780,514 |

*Geographic sector's information*

| | Three-month periods ended November 30, | |
|---|---|---|
| | 2018 | 2017 |
| | $ | $ |
| Revenue per geographic sector | | |
| United States | 4,671,210 | 2,873,075 |
| Japan | 2,940,193 | 1,369,104 |
| Canada | 515,824 | 496,391 |
| Other* | 975,511 | 1,625,033 |
| | 9,102,738 | 6,363,603 |

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

Revenues are attributed to the geographic sector based on the clients' location. Capital assets, which include property, plant and equipment and intangible assets, are all located in Canada.

During the three-month period ended November 30, 2018, revenues from two clients represented individually more than 10% of the total revenues of the Company, i.e. approximately 35% (medical reportable segment) and 32% (medical reportable segment).

During the three-month period ended November 30, 2017, revenues from two clients represented individually more than 10% of the total revenues of the Company, i.e. approximately 31% (medical reportable segment) and 21% (medical reportable segment).

*Medical Segment*

Information and analysis in this section for revenue and gross margin do not take into consideration licensing revenues ($2,302,000 for the three-month period ended November 30, 2018 and $1,028,000 for the three-month period ended November 30 2017, respectively).

For the three-month period ended November 30, 2018, sales from medical segment were $6,207,000 compared to $4,711,000 for the three-month period ended November 30, 2017, an increase of $1,496,000. The increase is mainly explained by higher FFR sales of $1,321,000.

Gross margin was $2,961,000 for the three-month period ended November 30, 2018 compared to $1,885,000 for the three-month period ended November 30, 2017, an increase of $1,076,000. The gross margin percentage for the three-month period ended November 30, 2017 was 40% compared to 48% for the three-month period ended November 30, 2018. The increase in gross margin is mainly explained by higher sales from our FFR products combined with a decrease in our production cost. The increase in gross margin percentage reflects higher sales volume and the related economies of scale combined with enhanced productivity.

Net earnings for the medical segment was $1,115,000 for the three-month period ended November 30, 2018 compared to a net loss of $1,078,000 for the same period last year. The increase in net earnings is mainly explained by higher sales and also the improvement of the gross margin, partly offset by higher sales, general and administrative expenses, as explained previously. Also, the increase in net earnings is explained by the recognition of higher non-recurring revenues of related to the achievement of a technical milestone.

Working capital for the medical segment as at November 30, 2018 was $16,276,000 compared to $15,183,000 as at August 31, 2018. The increase of $1,093,000 is mainly explained by higher trade and other receivables of $1,892,000, partly offset by higher accounts payables and accrued liabilities of $850,000.

*Industrial Segment*

For the three-month period ended November 30, 2018, sales from industrial segment were $594,000 compared to $625,000 for the three-month period ended November 30, 2017, a slight decrease of $31,000.

Gross margin was $378,000 for the three-month period ended November 30, 2018 compared to $423,000 for the same period in 2017, a decrease of $45,000. Gross margin percentage decrease from 68% for the three-month period ended November 30, 2017 to 64% for the three-month period ended November 30, 2018. The decrease in gross margin percentage is mainly explained by higher salaries and fringe benefits.

Net loss for the industrial segment was $23,000 for the three-month period ended November 30, 2018 compared to a net earnings of $143,000 for the three-month period ended November 30, 2017. The increase in net loss is mainly explained by the fact that we reversed an allowance for doubtful accounts related to a client in the industrial sector during the same period last year.

Working capital for the industrial segment as at November 30, 2018 was $1,135,000 compared to $1,164,000 as at August 31, 2017. The decrease of $29,000 is mainly explained by lower trade and others receivables of $173,000 and by higher accounts payable and accrued liabilities of $35,000. This is partly offset by higher cash and cash equivalents of $170,000.

**INFORMATION ON SHARE CAPITAL**

For the three-month period ended November 30, 2018, the Company granted to some employees a total of 300,000 stock options with an average exercise price of $0.80, cancelled 153,750 stock options with an exercise price of $1.28, whereas 100,000 stock options with an average exercise price of $0.44 were exercised, and 120,000 stock options with an exercise price of $0.85 expired.

For the three-month period ended November 30, 2017, the Company granted to some employees and Directors a total of 244,500 stock options with an average exercise price of $1.25, cancelled 52,500 stock options with an exercise price of $1.02 and 55,750 stock options with an average exercise price of $0.32 were exercised.

For the three-month period ended November 30, 2017, 2,380,500 warrants with an average exercise price of $1.55 expired.

As at January 10, 2019, the following components of shareholders' equity are outstanding:

| | |
|---|---:|
| Common shares | 89,968,817 |
| Stock options | 5,281,250 |
| Securities on a fully diluted basis | 95,250,067 |

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 U.S. and Europe, Opsens is confident in its capacity to recruit qualified human resources in a timely fashion.

Regarding the strategy on corporate executive remuneration, it is oriented towards 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 CONTROL 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's management, including 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 Corporation's ICFR during the three-month period ended November 30, 2018 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 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 November 30, 2018, 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, CA*

January 10, 2019