



**Lattice Biologics Ltd.**

**Management's Discussion and Analysis  
Fiscal 2018 First Quarter  
For the Three Months Ended December 31, 2017  
(Expressed in U.S. dollars)**

The following management discussion and analysis (“MD&A”) is a review of operations, current financial position and outlook for Lattice Biologics Ltd. (the “Company”, “we”, “us”, “our” or “Lattice”) for the three months ended December 31, 2017 and should be read in conjunction with the unaudited condensed consolidated interim financial statements for the three months ended December 31, 2017. Amounts reported and financial figures contained herein are denoted in United States dollars, unless otherwise noted as being denominated in Canadian dollars (“C\$”), and are based upon the financial statements prepared in accordance with International Financial Reporting Standards (“IFRS”), unless otherwise noted. Information contained herein is presented at April 30, 2018. Certain information in this MD&A or incorporated by reference, and in other public announcements by the Company is forward-looking and is subject to important risks and uncertainties. Words such as “may”, “will”, “believe”, “expect”, “anticipate”, “estimate” and similar expressions identify forward-looking statements. Forward-looking statements may be found in the General Development of the Business, Overview of Products, Operational Milestones, Outlook, Selected Financial Information, Results of Operations, Liquidity and Capital Resources and Overview sections of this MD&A. Forward-looking information includes information concerning the Company’s future financial performance, business strategy, plans, goals and objectives. Forward-looking statements are necessarily based upon estimates and assumptions considered reasonable by management but which are subject to business, economic and competitive uncertainties. Results could differ materially from those projected in forward-looking statements.

Although the forward looking information contained herein is based upon what management believes are reasonable assumptions, there can be no assurance that actual results will be consistent with these forward looking statements. Lattice has attempted to identify important factors that could cause actual results to differ materially from those contained in forward looking statements, however there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward looking statements. Lattice does not undertake to update any forward looking statements that are incorporated by reference herein, except in accordance with applicable securities laws.

Additional information is available on SEDAR at [www.sedar.com](http://www.sedar.com).

## **Highlights of the Three Months Ended December 31, 2017**

### ***Sales and Product Offerings***

- Successfully relocated processing facility to Belgrade, Montana, while expanding reach into personal injury and dental markets.
- Successfully passed American Association of Tissue Bank audit after relocation of processing facilities.
- Gross profit margin was 65.8% for the three months ended December 31, 2017, compared to 36.6% for the three months ended December 31, 2016.
- Penetrated new international markets in Columbia and Dominican Republic.
- Launched new products into higher margin dental market.
- Cash from operations was \$25,858 for quarter ended December 31, 2017 compared to a deficit of \$522,495 for quarter ended December 31, 2016.

### ***Finance***

- Successfully relocated operations to Belgrade, Montana from Scottsdale, AZ, resulting in operational efficiencies of over \$ 230,000 per month, year over year.
- Gross profit of \$238,199 on sales of \$362,137 for the three months ended December 31, 2017 compared to the same period in the prior year of \$326,620 on \$891,451 respectively.
- Reduced net loss from \$1,213,490 (\$0.02/share) for three months ended December 31, 2016 to \$132,726 or \$0.00/share for the three months ended December 31, 2017.
- Negative EBITDA for quarter ended December 31, 2017 was \$85,509 compared to negative EBITDA of \$571,408 for quarter ended December 31, 2016.
- Total Liabilities were consistent at \$7.7 million from September 30, 2017 to December 31, 2017
- Further efforts to improve the working capital condition of the Company include the conversion of \$0.8 million of liabilities to equity in the year ended September 30, 2017.
- Restructured Grenville debt to favorable terms in June 2017, including the conversion of \$2.7 million or royalty funding into equity, reduction of interest payments on the Grenville Secured Note from 12.5% to 4.244%, and reduced remaining royalty charges from 6% to 1.25%.
- Current liabilities remained consistent at \$6.5 million from September 30, 2017 to December 31, 2017.

### ***Research and Development***

- Patent pending for AmnioBoost product.
- Developed next generation AmnioBoost to super concentrate stem cells and cytokines.
- Re-formulated DBM putty to incorporate superior handling properties.
- Developed DBM fiber boats and strips to compete in spinal fusion market
- Validated products to compete in new dental markets.

### **Outlook**

The Company continues its efforts to raise additional capital to assist with working capital constraints to fulfill open purchase orders, progress with the launch of the Company's new product lines and with other research and development efforts. With appropriate working capital conditions, the Company expects it will expand current operations by accepting and processing a greater number of donors each month, in addition to launching new higher margin product lines. The Company also continues its efforts to complete additions to the Scientific Advisory Boards ("SAB"), formed by key opinion leaders ("KOLs"), who can be instrumental partners in the recruitment of additional surgeons and generating relevant clinical data.

### **Business Overview**

In the fall of 2013, Lattice acquired International Biologics, LLC ("International Biologics") of Scottsdale, Arizona. Lattice's facility includes International Organization for Standardization ("ISO") Class 1000 and ISO Class 100 clean rooms, and specialized equipment capable of crafting traditional allografts and precision specialty allografts for various clinical applications. Lattice's staff is comprised of trained tissue bank specialists, surgical technicians, certified sterile processing and distribution technicians, and CNC operators all of which maintain the highest standards of aseptic technique throughout each step of the manufacturing process. From donor acceptance to the final packaging and distribution of finished allografts, Lattice is committed to maintaining the highest standards of allograft quality, innovation, and customer service.

Lattice is engaged in the business of developing, manufacturing and marketing biologics products to domestic and international markets. Lattice is a personalized/precision medicine company in the field of cellular therapies and tissue engineering, with a focus on bone, skin, and cartilage regeneration. Lattice produces and distributes multiple allograft tissue products used by surgeons as bone, skin and cartilage tissue void fillers. Objectives of allograft use include pain relief, aid in the regeneration of tissue, and to provide a scaffold for bone, skin, and cartilage regeneration in spinal, sports, and breast reconstruction. Our products are used in a variety of applications including enhancing fusion in spine surgery, enhancing breast reconstruction post mastectomy, sports medicine indications including anterior cruciate ligament repair, promotion of bone growth in foot and ankle surgery, promotion of cranial healing following neurosurgery and subchondral bone defect repair in knee and other joint surgeries.

Lattice Biologics Inc. was incorporated on July 18, 2013 pursuant to the Delaware Act. During June 2017, we relocated our registered office and processing facilities to 512 East Madison Avenue, Suite 101, Belgrade, Montana 59714. Prior to this relocation, our registered office and processing facilities were located in Scottsdale, Arizona. The relocation is expected to provide savings of approximately \$80,000 per month in rents, overhead, wages, and utilities. The new facility is expected to enable us to focus on higher margin products and to develop processing automation.

### **Reverse Takeover**

On August 3, 2015 (as amended September 3, 2015), Lattice Biologics Inc. entered into a letter of intent to engage in an acquisition that would have Blackstone Ventures Inc. ("Blackstone"), an arm's-length Public Corporation, registered in British Columbia, Canada and trading on the TSX Venture Exchange, acquire all of the issued and outstanding securities of the Company (the "Reverse Takeover"). The acquisition was completed on December 23, 2015 and Blackstone was renamed as Lattice Biologics Ltd. This acquisition constituted a Reverse Takeover as the former Lattice shareholders received 35,730,750 post-consolidated shares of the combined entity, on a fully diluted basis. In connection with the financing, Blackstone completed an equity financing of 5,234,000 subscription receipts for proceeds of \$1,126,163. Each subscription receipt comprised of one common share of the combined entity, and one half of a common share warrant. Each common share warrant entitles the holder to purchase one additional common share of the combined entity at a price of C\$0.60 per share for a period of 12 months from the date of issuance, subject to acceleration.

## **Our Products**

Lattice has developed and currently manufactures and sells several human tissue-based products, primarily allografts, into the medical marketplace.

### ***Acellular Demineralized Bone Scaffold***

Acellular demineralized bone scaffold is 100% human cortical bone demineralized through a proprietary process to make the graft flexible while maintaining allograft integrity. This product has various applications in orthopedic, neurological, trauma, oral/maxillofacial and reconstructive procedures. The product can wrap around non-union fractures to assist with fusion, can act as a biologic plate or can be used in conjunction with a hardware plate system. Additionally, this product provides the surgeon with superior handling characteristics as the allograft can be easily sized using surgical scissors or a scalpel, and will withhold sutures or staples for fixation. This product comprised 59% of Lattice's revenues for the three months ended December 31, 2017 (three months ended December 31, 2016 – 64%).

### ***DBM Putty***

Demineralized Bone Matrix putty ("DBM Putty"), is an osteoinductive product used by surgeons as a bone void filler in the extremities and pelvis. To yield higher margins, in 2014, we made the strategic decision to cease outsourcing the production of our DBM Putty from a third party, and elected to start the development process to make this an in-house developed product. Lattice completed the development of its DBM Putty in 2015 and began its soft launch of production and distribution in the fourth quarter of calendar year 2015. During fiscal 2016, our DBM putty product became available for commercial sale to hospitals and physicians. Lattice's DBM putty is engineered with the surgeon in mind. The product's handling characteristics allow it to be easily molded into any shape and compressed into bony voids. Taking the design a step further, we have validated a low-dose, low-temperature gamma sterilization process to provide maximum osteoinductive potential, while still affording device level sterility. This product comprised 5% of Lattice's revenues for the three months ended December 31, 2017 (three months ended December 31, 2016– 6%).

### ***ADM dermal scaffold***

Acellular dermal matrix ("ADM") dermal scaffold is an extension of Lattice's core biologics technology and our second human acellular biological scaffold. ADM is an acellular matrix made from donated human dermal tissue that is used to replace a patient's damaged tissue. ADM provides a natural collagen tissue scaffold that promotes cellular ingrowth, tissue vascularization and regeneration. The ADM scaffold tissue reabsorbs into the patient's dermal tissue for a biocompatible, natural repair. This product comprised 20% of Lattice's revenues for the three months ended December 31, 2017 (three months ended December 31, 2016 – 23%).

### ***Amniotic Fluid Based Products***

We have developed two new amniotic fluid based products and had our first commercial sales in November 2016: AmnioBoost and AmnioBlast. These fluids are taken from healthy scheduled caesarean deliveries and further minimally processed to remove contaminants such as fetal urine and cellular detritus. The fluid can be further processed to super concentrate, up to twenty times the cytokines and stem cells naturally found in the amniotic fluid. The company is investigating multiple indications for these new products. This product category comprised 17%, 6%, 17% and 10% of Lattice's revenues for the three months periods ended December 31, 2017, September 30, 2017, June 30, 2017, and March 31, 2017 respectively.

### ***Other Products***

In addition, Lattice makes and sells (i) sports allografts which are processed specifically for anterior and posterior cruciate ligament repairs, anterior cruciate ligament reconstruction and meniscal repair; (ii) milled allografts which are comprised of cortical bone milled to desired shapes and dimensions, also called milled spinal allografts; and (iii) traditional allografts for multi-disciplinary applications including orthopedics, neurology, podiatry, oral/maxillofacial, genitourinary and plastic/reconstructive.

## **Market**

The regenerative medicine field affects many lives each year across the globe. The ability to heal properly after bone, wound, or reconstruction surgery is critical to the success of the procedure and quality of life for the patient. The current standard of care for allograft transplantation is relatively low, making room for significant opportunity for product improvement in the marketplace.

The orthopedic biomaterials market consists of materials that are organic, inorganic or synthetic in nature. These materials are implanted or applied in or near the indicated bone to facilitate healing, encourage bone tissue augmentation, compensate in areas where bone tissue is depleted and restore structure to allow for repair. Orthopedic biomaterials are capable of producing specific biological action or regenerative responses that are beyond what is observed in normal healing. These materials are often used as substitutes to autograft materials, which are taken from a harvest site in the patient to patch or repair the wounded or unhealthy site.

Bone is a biologically active tissue and may or may not regenerate depending on the condition of the patient. The damage may be significant enough that a scaffold to help regenerate the surgical site may be necessary.

We are primarily selling our products in the United States domestic national marketplace (over 90% of sales in the years ended September 30, 2017 and 2016). However, Lattice continues to grow its outreach over the past several quarters while onboarding new hospitals and distributors throughout the world.

Political and economic conditions have a large impact on the market as they could create downward pressure on reimbursement limits at the hospital levels, or alternatively, plans could be restructured to include superior products at higher price points. These are factors that Lattice continues to monitor as we distribute our existing products, but also in consideration for future product development.

To continue gaining market acceptance, we continue efforts to obtain clinical data and white papers, which result in easier acceptance into hospitals. With increased scrutiny within the industry, it is becoming increasingly more common to be requested clinical data before products are accepted for use in various hospitals and clinical applications.

With respects to our current product offering, we expect to maintain a competitive position by continuing to enforce best practices in the manufacturing and distribution of our products. With respect to future products, we remain committed to our research and development efforts, as well as continued efforts in forming partnerships with other related companies and physicians, who can assist us with continued innovation and development of our future product lines.

Lattice does not have seasonality issues with respect to product sales and distribution, with the exception of national holidays and national medical conferences, which results in severe decreases in the amount of scheduled surgeries and tissue applications.

## **Marketing Plans and Strategies**

We are committed to building our direct sales channel into the primary method of distributing our products. As a result, this investment in the direct sales channel puts Lattice in a position to generate increased revenues at higher margins in the future. No assurance can be given that these efforts will be successful.

Lattice also markets its products through independent and private label distributors who receive a discount from the list price, and then sells to their customer base. Since Lattice has experienced a decline in revenue from this sales channel, we expect it will continue to represent a smaller portion of our overall revenue as our direct distribution channel grows.

Lattice is continuously adding members to its SABs for each of its surgeon call points that consist of KOL's in the field. We expect that our SAB members will be referring our products to other surgeons and medical care providers, as well as presenting the technology in appropriate academic and industry conferences. Lattice has established procedures that are designed to prevent abuses involving these SAB members and others with whom they may have financial relationships and been advised by counsel that this program complies with the Stark Laws and applicable anti-kickback regulations. The "Stark Laws" are laws that were put in place to put a limitation on certain physician referrals. The Stark Laws prohibit physician referrals of designated health services ("DHS") for Medicare and Medicaid patients if the physician (or an immediate family member) has a financial relationship with that entity.

In addition to the establishment of its SAB, we continue to attend various healthcare trade shows including national conferences where we are able to market our current products, as well as ongoing developments with our future products. Lattice also utilizes call centers to continuously grow our database to which Lattice sends out its newsletters, which promotes ongoing business activities as well as product development updates. We also work actively to develop our clinical data and white papers to which we use to promote our product and gain market acceptance.

## Proprietary Protection

### *Provisional Patents*

The following summarizes Lattice's current patent portfolio, including patents covering technology licensed by us for use or inclusion in certain of our products:

*Patent Application:* Method for assessing the effects of select nutrients in growth media on fitness of mesenchymal stromal cells for stem cell transplantation.

*Field of the Invention:* This invention relates to the field of stem cells, particularly mesenchymal stromal cells, and their usage therapeutically in humans to heal and establish successful tissue graft transplantation. This invention further relates to the usage of nucleic acid aptamers as biosensors for intracellular metabolites. The method employed is unique due to: (i) the choice of molecular targets of the aptamers; (ii) their usage to quantitate concentrations of molecules simultaneously and rapidly in living cells; and (iii) the application of this quantitation to developing optimal conditions in the surrounding growth media for nourishing transplantation-ready stem cells.

Lattice believes its current and proposed patent filings and patent positions will facilitate growth and enhance our proprietary core competencies, enabling us to protect and expand revenue growth in the future. Lattice expects that additional patent applications will be filed and prosecuted as inventions are discovered, technological improvements and processes are developed and specific applications are identified. The status of individual patents and patent jurisdiction is maintained in Lattice's internal records. Lattice anticipates, however, that there may be instances in which it enters into collaborative research and development agreements with stem cell companies under such terms that the stem cell company may or will retain a right to make future patent filings arising from such cooperative development agreement. In such instances, Lattice will attempt to protect its overall patent use rights by agreements, which limit the right of the collaborative party to an exclusive right only as it pertains to the field of use, as defined by the applicable project's scope of work. In this manner, Lattice anticipates that it will receive future benefit and use of such intellectual property outside the field of use, as defined by any given scope of work. There can be no assurance that we will be able to obtain final approval of any patents.

### **Operational Milestones Achieved Since Inception**

- (i) The Company has been able to enter into numerous distribution agreements with various medical product companies pursuant to which these distributors market, promote, distribute and support Lattice's products. Through the assistance of these distributors and through direct customer outreach, Lattice has been able to gain hospital approvals across the United States.
- (ii) The hiring of the Company's management team in 2014 and 2015, who have bolstered the Company's growth potential and have amended the Company's policies and standard operational procedures to achieve stronger practices, which we expect to contribute to stronger financial success, and have recently secured long term AATB approval.
- (iii) Development of modified extracellular matrix for enhanced stem cell homing and engraftment was performed and provisional patent was filed in 2014. The ECM technology enhances cell growth from solid tumors and can be utilized for precision diagnostics to enhance patient response.
- (iv) Development of novel amniotic fluid based products; AmnioBoost and AmnioBlast.
- (v) Establishment of the SAB continues with key SAB members signed and several additional hospital approvals received through their assistance. The SAB are an instrumental partner in the recruitment of additional physicians and presenting the technology at appropriate academic and industry conferences.
- (vi) Completion of the DBM Putty product line in the fourth quarter of calendar 2015, and moved towards full production at the end of December 2015. Lattice previously outsourced the conversion of bulk cortical into Putty using a third party vendor who private labeled for Lattice. By developing our in house product with an already proven customer base, we have a strong and pre-existing sales channel with significant increases made to the gross margin achievable on the sale of DBM Putty.
- (vii) Restructuring of trade payable and debt in order to achieve financial stability in the short term. The Company continues to achieve success as it progresses with its initiatives to complete further equity financings (after completing the Reverse Takeover to become a public entity) in efforts to de-lever the Company's high debt to equity ratio.

## Business Objectives and Future Outlook

Lattice plans to achieve the following objectives over the upcoming fiscal years of operations:

- (i) Expand current operations by accepting a greater number of donors each month from approved and regulated recovery agencies, and in turn process a greater number of donors each month.
- (ii) Continuing the trend and focus on higher profitability, the Company remains committed to shifting sales efforts to higher margin product mix.
- (iii) In the calendar 2017 year, the Company has completed additions to the SAB formed by KOLs who are leaders in their fields and who can be instrumental partners in the recruitment of additional physicians and presenting the technology at appropriate academic and industry conferences.
- (iv) In addition to partnering with distributors, the Company desires to continue developing and implementing a high-level, national effort to present the Company's products as a value proposition to hospital chains, insurers and other purchasing organizations. These direct relationships are expected to lower the overall cost of healthcare.

## Selected Financial Information and Management's Discussion and Analysis

General financial information on the Company's financial condition is as follows at:

	<b>December 31, 2017</b>	<b>September 30, 2017</b>
Inventory (i).....	\$ 1,786,198	\$ 1,847,574
Current assets.....	2,030,316	2,087,839
Total assets.....	3,354,335	3,446,993
Current liabilities.....	(6,493,124)	(6,527,401)
Total liabilities.....	(7,691,716)	(7,709,607)
Working capital deficiency.....	(4,462,808)	(4,439,562)
Accumulated deficit.....	(14,316,143)	(14,183,417)

- (i) Inventory consists of the following:

	<b>December 31, 2017</b>	<b>September 30, 2017</b>
	<b>(Unaudited)</b>	
Unprocessed goods.....	\$ 1,054,887	\$ 1,039,215
Finished goods.....	761,981	839,029
Reserve.....	(30,670)	(30,670)
Total inventory.....	<u>\$ 1,786,198</u>	<u>\$ 1,847,574</u>

### *Total Assets*

At December 31, 2017 total assets were relatively consistent from September 30, 2017 with less than \$0.1 million primarily relating to depreciation and amortization charged on property and equipment and intangible assets.

## Total Liabilities

At December 31, 2017 total liabilities were relatively consistent from September 30, 2017, with an approximately \$0.02 million decrease, relating to a \$0.2 million decrease in warrant liability offset by a \$0.1 million increase in accounts payable and accrued liabilities and notes payable.

## Operational Performance

### Summary of Quarterly Results

The following table sets out selected unaudited financial information, prepared in accordance with IFRS. The information contained herein is drawn from interim financial statements of the Company for each of the following quarterly periods ending:

	<u>Dec-31</u> <u>2017</u>	<u>Sep-30</u> <u>2017</u>	<u>Jun-30</u> <u>2017</u>	<u>Mar-31</u> <u>2017</u>	<u>Dec-31</u> <u>2016</u>	<u>Sep-30</u> <u>2016</u>	<u>Jun-30</u> <u>2016</u>	<u>Mar-31</u> <u>2016</u>
Revenue.....	\$ 362,137	\$ 398,542	\$ 684,026	\$ 765,357	\$ 891,451	\$ 732,905	\$ 972,320	\$ 1,006,975
Cost of sales.....	123,938	554,717	514,761	533,957	564,831	558,396	744,094	818,884
Gross profit.....	238,199	(156,175)	169,265	231,400	326,620	174,509	228,226	188,091
Operating costs (i).....	336,332	536,590	605,968	950,833	917,809	1,267,507	836,955	965,394
EBITDA (ii).....	(85,509)	(678,425)	(416,922)	(699,652)	(571,408)	(1,072,009)	(577,075)	(763,988)

Certain adjustments have been made to the quarterly information for the first three quarters of the fiscal year ended September 30, 2016, as compared to data contained in the quarterly filings for such quarters. These changes relate to certain adjustments for cost of sales and operating costs that were not recognized until the fourth quarter of such fiscal year.

- (i) Operating costs are defined as all general and administrative costs, research and development, professional fees, rent, salaries and benefits, sales and marketing, and utilities expenses.
- (ii) EBITDA is defined as gross profit less operating costs (as defined above).

## Revenue

Revenue by product line is summarized as follows for each of the quarterly periods ending:

	<u>Dec-31</u> <u>2017</u>	<u>Sep-30</u> <u>2017</u>	<u>Jun-30</u> <u>2017</u>	<u>Mar-31</u> <u>2017</u>	<u>Dec-31</u> <u>2016</u>	<u>Sep-30</u> <u>2016</u>	<u>Jun-30</u> <u>2016</u>	<u>Mar-31</u> <u>2016</u>
ADM dermis.....	\$ 73,399 20%	\$ 54,700 14%	\$ 72,370 11%	\$ 212,740 28%	\$ 208,912 23%	\$ 130,575 18%	\$ 220,365 23%	\$ 48,336 5%
DBM putty.....	18,749 5%	- 0%	17,941 3%	62,964 8%	58,110 7%	151,071 21%	246,235 25%	104,856 10%
Bone scaffold.....	212,972 59%	315,152 79%	454,132 66%	403,027 53%	567,841 64%	411,131 56%	505,603 52%	847,326 84%
Other.....	57,017 16%	28,690 7%	139,583 20%	86,626 11%	56,588 6%	40,128 5%	117 0%	6,457 1%
Total revenue.....	\$ 362,137 100%	\$ 398,542 100%	\$ 684,026 100%	\$ 765,357 100%	\$ 891,451 100%	\$ 732,905 100%	\$ 972,320 100%	\$ 1,006,975 100%

The decline in revenues in recent periods is due to a shift to higher margin products and renegotiated contracts (see the Gross Margin discussion below). A discussion of the Company's product lines is as follows:

- (i) Acellular demineralized bone scaffold: This product line has been in full launch since the acquisition of International Biologics. We have been adding further distributors and direct hospital relationships since this acquisition, but have been restricted by working capital deficiencies in recent periods that prohibited the Company from increasing levels of production. Lattice expects to increase these levels to continue to meet customer demand. Lattice already has the labor and facilities needed to absorb such high growth.
- (ii) ADM dermal scaffold: Lattice continues to recruit additional physicians to generate additional clinical data. These physicians are key opinion leaders in their industry who assist Lattice in recruiting additional surgeons and presenting the technology at appropriate academic and industry conferences. As Lattice continues its efforts to gain mass hospital approvals, we expect increased throughput with the SAB consisting of more physicians who possess a stronger outreach.



- (iii) DBM putty: Lattice completed the development of its DBM putty in 2015 and began its soft launch of production and distribution in the fourth quarter of calendar year 2015. During fiscal 2016, our DBM putty product became available for commercial sale to hospitals and physicians. Lattice already has the user and customer base for this product given they had been selling the product since the acquisition of International Biologics. The key difference is that in 2015, Lattice was able to bring the production and development of this product in house (previously, had been outsourcing the production). This was done in an effort to increase gross margin on DBM putty sales.

### ***Gross Margin***

Lattice has been able to increase gross margins by diversifying the sales mix to include the Company's new product launched, being the ADM Dermal scaffolds, DBM Putty and amnion based products. These new products possess higher margins than the traditional Acellular Demineralized Bone Scaffold. Lattice expects future margins to be favorable in comparison to prior margins as the Company achieves a more balanced sales mix between all its product lines. The Company expects to continue growing margins on our traditional Acellular Demineralized Bone Scaffold by increasing production levels (see "Revenue" section above).

### ***Operating Costs***

Operating expenditures are summarized as follows:

	<b>For the Three Months Ended December 31,</b>			
	<b>2017</b>	<b>% Revenue</b>	<b>2016</b>	<b>% Revenue</b>
Operating expenses:				
Depreciation and amortization.....	\$ 37,298	10 %	\$ 37,039	4 %
General and administrative.....	34,793	10	91,546	10
Research and development.....	541	-	135,436	15
Professional fees.....	26,940	7	161,443	18
Rent.....	8,749	2	44,975	6
Salaries.....	235,230	65	321,327	36
Sales and marketing.....	26,950	7	151,582	17
Utilities.....	3,129	1	11,500	1
Total operating expenditures.....	<u>\$ 373,630</u>	<u>103 %</u>	<u>\$ 954,848</u>	<u>107 %</u>

### ***Depreciation and amortization***

Depreciation and amortization for the three months ended December 31, 2017 was consistent compared to the three months ended December 31, 2016.

### ***General and Administration***

General and administrative expense declined by approximately \$0.06 million to \$0.03 million for the three months ended December 31, 2017, as compared to the three months ended December 31, 2016, primarily as a result of approximately \$60,000 of consulting fees that were included in general and administrative expenses in the previous period that are no longer owed.

### ***Research and Development***

Research and development expense decreased by approximately \$0.1 million to negligible amount for the three months ended December 31, 2017, as compared to the three months ended December 31, 2016. This is primarily due to reduced personnel.

### *Professional Fees*

Professional services decreased by \$0.1 million to \$0.03 million for the three months ended December 31, 2017 as compared to the three months ended December 31, 2016, and relate to legal, auditing and other professional related fees incurred. This is primarily due to reduced legal expenses encountered in day to day operations of the Company.

### *Salaries*

Salaries included in operating expenses declined by approximately \$0.1 million to \$0.2 million for the three months ended December 31, 2017, as compared to the three months ended December 31, 2016. The Company has reduced personnel due to suspending processing operations in June of 2017.

### *Sales and Marketing*

Sales and marketing costs declined here by approximately \$0.1 million to \$0.03 million for the three months ended December 31, 2017, as compared to the three months ended December 31, 2016 and relates to a focus on new markets to concentrate on a direct to consumer business model with increased margins.

### *Other*

Rent and utilities expenditures declined by approximately \$0.04 million for the three months ended December 31, 2017 as compared to the three months ended December 31, 2016. This is primarily due to the move from the Scottsdale, Arizona facilities to the Belgrade, Montana facilities in June 2017.

### *Interest and Finance Charges*

For the three months ended December 31, 2017 and 2016, the Company's interest and finance charges totaled \$0.1 million and \$0.2 million, respectively. This decline primarily relates to a decline in interest rate on the Grenville secured note payable.

### *Share-based Payments*

Share-based payment expense was \$0.04 million for the three months ended December 31, 2017 and \$nil for the three months ended December 31, 2016. Share-based payment expense for the year ended September 30, 2017 relates to the grant of 3,300,000 stock options to members of the Company's Scientific Advisory Board, which is discussed in more detail in Note 15 to the Company's annual consolidated financial statements for the year ended September 30, 2017.

### *Loss on Settlement of Payables*

For the three months ended December 31, 2017 loss on settlement of payables was \$nil as compared to \$0.2 million for the three months ended December 31, 2016. The payables in the three months ended December 31, 2016 were settled through the issuance of common stock and warrants and reflects the difference in the fair value of the common stock and warrants that were issued compared to the balance of the payable settled.

### *Change in Fair Value of Warrants*

The Company's outstanding warrants that were issued in conjunction with offerings of the Company's debt or common stock, or as settlement for liabilities incurred, have been classified as liabilities as the Company's functional currency is the United States dollar while the strike price of the warrants is denominated in Canadian dollars. Changes in the fair value of these warrants are recognized as income or loss and resulted in the recognition of other income of \$0.2 million and \$0.04 million for the three months ended December 31, 2017 and 2016, respectively.

### Royalty Costs

For the three months ended December 31, 2017 and 2016, the Company's royalty costs totaled \$nil and \$0.2 million, respectively. Royalties have been revised as a result of the recent debt restructuring with Grenville, which is described in the notes to the annual consolidated financial statements for the year ended September 30, 2017.

### Off Balance sheet Arrangements

At December 31, 2017, the Company had no off balance sheet arrangements such as guaranteed contracts, contingent interests in assets transferred to an entity, derivative instrument obligations or any instruments that could trigger financing, market or credit risk to the Company.

### Contingencies

In the ordinary course of business activities, the Company may be contingently liable for litigation and claims with customers, vendors and former employees. Management believes that adequate provisions have been recorded in the accounts where required.

### Commitments

The Company is committed to leases of its premises and equipment. Minimum lease payments for fiscal 2018 and successive fiscal years are as follows:

	<b>Remainder of 2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>Total</b>
Equipment.....	\$ 17,127	\$ 3,806	\$ -	\$ -	\$ -	\$ 20,933
Premises - Montana.....	28,326	-	-	-	-	28,326
Premises - Arizona.....	36,900	95,400	47,700	-	-	180,000

As described above, the Company relocated its head office and processing facilities to Belgrade, Montana and vacated its Scottsdale, Arizona facility. The Company has executed a settlement agreement as a result of vacating the premises in Scottsdale, Arizona.

The June 2017 lease for the Belgrade, Montana facility calls for minimum monthly payments of \$4,721 and expires June 30, 2018 with an option to renew for an additional year under certain circumstances. The Company is in ongoing negotiations to extend to a multi-year lease.

The Company's debt and royalty funding obligations are due as follows for years ending September 30:

	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>Thereafter</b>
Notes payable (i).....	\$ 1,809,949	\$ -	\$ -	\$ -	\$ 465,364	\$ -
Accounts payable and other accrued liabilities...	4,358,204	-	-	-	-	-
Factoring advances.....	105,319	-	-	-	-	-
Finance leases.....	21,291	25,329	7,899	-	-	-
Royalty (ii).....	-	-	-	-	-	-

(i) The balance due in 2022 is presented on a discounted basis. This note calls for monthly payments of interest of \$3,000 with a balloon payment in 2022 of approximately \$0.8 million.

(ii) Royalties under the New Royalty are contingent upon meeting a minimum Excess Free Cash Flow and do not accrue if such minimum is not met.

## **Related Party Transactions**

For the three months ended December 31, 2017, two of the Company's officers, who are key management personnel, elected to defer payment of their salaries totaling \$110,025, resulting in a total balance due such officers of \$1,179,325 at December 31, 2017 (September 30, 2017 - \$1,069,300). These balances are included in accounts payable and other accrued liabilities on the accompanying Unaudited Condensed Interim Consolidated Statements of Financial Position. At December 31, 2017, the Company also owes one of these individuals \$51,961 for reimbursable expenditures and \$49,847 for interest, which is also included in accounts payable and other accrued liabilities on the accompanying Unaudited Condensed Interim Consolidated Statements of Financial Position, which is associated with a note payable that was converted to equity during the year ended September 30, 2016 (September 30, 2017 - \$51,961 and \$47,463 respectively).

During June 2017, an officer and director of the Company entered into the Belgrade, Montana facility lease for the benefit of the Company. This officer and director has personally guaranteed this lease and there is no additional compensation contemplated to this individual beyond the payments required to the lessor under the terms of the lease agreement.

## **Subsequent Events**

During February 2018, the Company executed a promissory note with Eurofins VRL, Inc. to satisfy debt of \$79,836. Payment terms are 24 monthly payments of \$3,611 and interest is at 8% per annum.

During March 2018, a claim was filed for unpaid services in the amount of \$402,400. This amount is recorded in accounts payable at year end. The Company is currently negotiating a settlement agreement.

During April 2018, the holder of the Assumed International Biologics Loan (see Note 12) transferred the loan in the amount of \$660,000 to a third party. Repayment terms are \$3,000 per month beginning May 15, 2018 until repaid in full.

During April 2018, the Company entered into an agreement to satisfy any potential liability with the former landlord in Scottsdale, Arizona for approximately \$180,000 to be paid over 2 years. Payment terms include \$9,000 due April 1, \$4,000 per month May 1 through July 1, with regular monthly payments of \$7,950 starting August 1, 2018 for twenty months. Prepayment clauses allow for discounted payment plan with accelerated payments. Should these required payments not be met, the Company will be required to pay \$225,000 plus interest at a rate of 10% per annum, accruing from April 1, 2018, net of any payments made.

During April 2018, the Company received a judgment notice of \$60,000 from a vendor. The Company is continuing negotiations to reach a settlement agreement.

During April 2018, the Company agreed to pay a distributor for commissions in the amount of \$37,200. Payment terms are \$3,100 per month starting June 1, 2018. Should these required payments not be met, the Company will be required to pay \$37,200 plus interest at a rate of 10% per annum, accruing from November 10, 2017, net of any payments made.

The Company is currently restructuring certain notes that expired February 1, 2018 (see Note 12).

From October 2017 through April 2018, the Company has pending settlement agreements that may include equity conversions, up to \$1.4 million at C\$0.10/share.

## **Shares of Common Stock**

The Company is authorized to issue an unlimited amount of voting common shares without par value, an unlimited number of non-voting restricted common shares without par value and an unlimited number of preferred shares without par value. The holders of shares of Lattice's common stock are entitled to receive notice of and to attend at all meetings of the holders of Lattice's common stock and each stockholder is entitled to one vote for each share of the capital stock having voting power held by such stockholder. The holders of Lattice's common stock are entitled to receive dividends as and when declared by the Lattice Board. Before payment of any dividend, the Lattice Board may set aside a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of Lattice, or for such other purpose as the directors shall think conducive to the interest of Lattice, and the directors may modify or abolish any such reserve.

## Capitalization

The following table outlines the capitalization of Lattice.

<u>Designation of Security</u>	<u>Number Authorized</u>	<u>Number Outstanding at December 31, 2017</u>	<u>Number Outstanding at April 30, 2018</u>
Common stock.....	Unlimited	62,717,803	62,717,803
Restricted stock.....	Unlimited	30,740,497	30,740,497
Warrants.....	Unlimited	7,618,290	7,618,290
Options.....	10% of common shares	3,300,000	3,300,000

## Legal Proceedings

During October 2016, a distributor of the Company's products filed a claim in the amount of approximately \$90,000 related to commissions the distributor claimed to be due. The Company has recognized an accrual for the commissions the distributor claims are due at both December 31, 2017 and September 30, 2017; however, the Company does not believe its exposure to this matter to be greater than the amount accrued.

During October 2016, a member of the Company's SAB filed a claim in the amount of \$40,000 for unpaid services. The Company has recognized a total of approximately \$6,000 relative to this matter, which management believes is the accurate amount due, and expects to prevail in this matter relative to any additional amounts the SAB member believes are due.

During January 2017, the Company received notice from a vendor for breach of contract. The Company has deemed the suit without merit. The Company has recorded a provision of \$100,000 to cover professional fees and potential settlement costs relating to this matter.

## Liquidity

The Company's consolidated financial statements have been prepared on a going concern basis, which presumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business. The Company incurred a net loss of \$0.1 million for the three months ended December 31, 2017 and has incurred losses in the past, has an accumulated deficit of \$14.3 million at December 31, 2017 (September 30, 2017 - \$14.2 million), and has a working capital deficiency of \$4.5 million at December 31, 2017 (September 30, 2017 - \$4.4 million). These conditions reflect a material uncertainty that casts significant doubt to the Company's ability to continue as a going concern. In order to meet its obligations and realize its investment in its assets, the Company is dependent on the continued support from investors and related parties. The Company may not be able to achieve or maintain profitability and may continue to incur losses in the future. In addition, it is expected that the Company will continue to increase operating expenses as it implements initiatives to continue to grow its business.

The Company plans to continue to make investments to support the growth of the business and is expected to require additional funds to respond to business challenges, including the need to develop new services or enhance existing services, enhance operating infrastructure and acquire complementary businesses and technologies. Accordingly, the Company is subject to liquidity risk. Management will be required to continue to raise capital to develop, market and promote the Company's products and technology, and to maintain its ongoing operations.

## **Financial Instruments and Risk Management**

The Company is exposed to a variety of financial risks by virtue of its activities: market risk (including currency risk and interest rate risk), fair value risk, credit risk and liquidity risk. The overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on financial performance. Risk management is carried out by management under policies approved by the Board of Directors. Management is charged with the responsibility of establishing controls and procedures to ensure that financial risks are mitigated in accordance with the approved policies.

### **Market Risk**

*Currency risk:* The Company's revenues, expenses and financing are primarily denominated in US dollars. There is minimal exposure to currency risk.

*Interest rate risk:* Interest rate risk is the risk that the future cash flows or the fair value of a financial instrument will fluctuate because of changes in market interest rates. The majority of the Company's debt is at fixed rates and due in the short term. Accordingly, there is limited exposure to cash flow or price interest rate risk.

### **Credit Risk**

For the three months ended December 31, 2017, the Company had no customer that accounted for more than 10% of sales (year ended September 30, 2017 – no customer). The Company mitigates this risk by evaluating the outstanding balances on a regular basis and abiding by the credit limit that is dictated by the customer's credit rating. At December 31, 2017, the Company has \$23,600 of receivables past due (September 30, 2017 – \$38,413).

### **Liquidity Risk**

Liquidity risk is the risk that the Company will not be able to meet its obligations as they fall due. The Company manages its liquidity risk by forecasting cash flows from operations and anticipated investing and financing activities. Senior management is also actively involved in the review and approval of planned expenditures.

At December 31, 2017, the Company has current liabilities of \$6.5 million (September 30, 2017 – \$6.5 million) due within 12 months and has cash of less than \$0.01 million (September 30, 2017 – less than \$0.1 million) to meet its current obligations. At December 31, 2017, the Company has a working capital deficiency of \$4.5 million (September 30, 2017 - \$4.4 million) and accordingly, the Company is subject to liquidity risk. Management plans to continue to raise capital to develop, market and promote its products and technology to maintain its ongoing operations.

### **Capital Management**

The Company's objective is to develop a strong capital base to sustain future development and growth of the business. The Company manages its capital by maintaining a flexible capital structure which optimizes the cost of capital at an acceptable level of risk and makes adjustments on it in the light of changes in economic conditions and the risk characteristics of its underlying assets. The Company's capital base is currently represented by total deficit, notes payable, and royalty funding. Management reviews the Company's business plans as part of its strategic initiatives in conjunction with its financial forecast. There has been no change in the capital management policies of the Company during the current fiscal year.

The Company regularly monitors and reviews the amount of capital in proportion to risk and future development. The Company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets.

## Accounting Estimates and Judgements

The preparation of financial statements in compliance with IFRS requires the Company's management to make certain estimates and assumptions that they consider reasonable and realistic. Despite regular reviews of these estimates and assumptions, based in particular on past achievements or anticipations, facts and circumstances may lead to changes in these estimates and assumptions which could impact the reported amount of the Company's assets, liabilities, equity or earnings. These estimates and assumptions notably relate to the amortization of and measurement of impairment of property and equipment and other assets, and deferred income taxes. The judgments notably relate to the assessment of going concern uncertainties, the Company's inventory costing technique, the determination of cash generating units and review of impairment and the Company's accounting applied to the royalty funding. The most significant estimates and judgements are described below:

- i) *Inventory costing technique.* The Company uses a specific identification approach to capture the costs of raw materials and overhead to bring the inventory to its present salable condition. This specific identification approach best reflects the physical inputs of raw materials, direct labor and direct overhead.
- ii) *Determination of Cash Generating Unit and review of impairment.* The Company has determined that it presently operates as one cash generating unit and has allocated goodwill to this single cash generating unit. The Company is required to test all indefinite life intangible assets at least annually.
- iii) *Accounting for Grenville Royalty Funding and Debt Restructuring.* The Company's royalty funding agreement with Grenville Royalty Corp ("Grenville") has been accounted for as a financial liability and measured at fair value at initial recognition, with a re-measurement recognized in June 2017 at the time of the effectiveness of the debt restructuring with Grenville. The Company made this determination after reviewing the substance of the agreement and determining that the cash received at the inception of the arrangement did not represent advance payments for any future sales. The Company has valued the royalty agreement (i) at fair value when it initially became party to the arrangement and (ii) upon re-measurement in June 2017 for the debt restructuring with Grenville using the prevailing discount rate at the applicable time.
- iv) *Provision for Lease Termination.* During June 2017, the Company relocated its registered office and processing facilities from Scottsdale, Arizona to Belgrade, Montana. At such time, the Company recognized a provision for the onerous Scottsdale, Arizona lease based on management's best estimate of unavoidable payments that are expected under the lease agreement following the facility relocation. The provision for the onerous Scottsdale, Arizona lease has been updated to reflect the agreement reached with the Company's former landlord.

## Risk Factors and Risk Management

Lattice will be highly dependent on its ability to obtain donor cadavers as the raw material for many of its products. The availability of acceptable donors is relatively limited and Lattice will compete with many other companies for this limited availability. The availability of donors is also impacted by regulatory changes, general public opinion of the donor process and Lattice's reputation for its handling of the donor process. In addition, due to seasonal changes in the mortality rates, some scarce tissues are at times in short supply. Any disruption in the supply of this crucial raw material could have significant consequences for Lattice's revenue, operating results and continued operations.

Pre-processing and post-processing quality assurance and quality control reviews are performed on all donated tissues. Each donor is approved by Lattice's Medical Director to ensure compliance with donor acceptance criteria prior to release. Lattice's policies and procedures for donor tracking, documentation, tissue processing, allograft packaging, and distribution activities are designed and executed in compliance with current FDA regulations and AATB standards, ensuring safe, high-quality allograft for transplantation. Any failure to identify and discard contaminated tissues could result in adverse effects including litigation in the event of an allograft being implanted that did not follow Lattice's standard operating procedures designed to ensure FDA compliance.

Lattice may not be able to manage future growth efficiently or profitably. Lattice's business is unproven on a large scale and actual revenue and operating margins, or revenue and margin growth, may be less than expected. If unable to scale production capabilities efficiently, Lattice may fail to achieve expected operating margins, which would have a material and adverse effect on operating results. Growth may also stress Lattice's ability to adequately manage its operations, quality of products, safety and regulatory compliance. If growth significantly decreases its reserves, it may be required to obtain additional financing, which may increase indebtedness or result in dilution to stockholders. Further, there can be no assurance that Lattice would be able to obtain any additional financing.

As a manufacturer and marketer of medical devices in the United States, Lattice is subject to extensive regulation by the FDA and the Center for Medicare Services of the U.S. Department of Health and Human Services and other federal governmental agencies and, in some jurisdictions, by state and foreign governmental authorities. These regulations govern the introduction of new medical devices, the observance of certain standards with respect to the design, manufacture, testing, labeling, promotion and sales of the devices, the maintenance of certain records, the ability to track devices, the reporting of potential product defects, the import and export of devices and other matters. The industry is facing an increasing amount of scrutiny and compliance costs as more states are implementing regulations governing medical devices, pharmaceuticals and/or biologics which affect many of Lattice's products.

Lattice is currently in the process of developing sales channels for its products but there can be no assurance that these channels can be developed or that Lattice will be successful in selling its products. Lattice's immediate operations contemplate selling its products through direct sales by employees and indirectly through distributor relationships. Lattice anticipates engaging in a major initiative to build and further expand its direct sales force. This effort will have significant costs that will be incurred prior to the generation of revenue sufficient to cover these costs. The costs incurred for these efforts may impact operating results and there can be no assurance of their effectiveness. Many of Lattice's competitors have well-developed sales channels and it may be difficult for the Company to break through these competitors to take market share. If Lattice is unable to develop these sales channels, Lattice may not be able to grow revenue or maintain the current level of revenue generation.

Lattice's success will depend, to a large extent, on its ability to successfully obtain and maintain patents, prevent misappropriation or infringement of intellectual property, maintain trade secret protection, and conduct operations without violating or infringing on the intellectual property rights of third parties. There can be no assurance that Lattice's patented and patent-pending technologies will provide a competitive advantage, that it will be able to develop or acquire additional technology that is patentable, or that third parties will not develop and offer similar technologies. Lattice currently has no patents and cannot provide assurance that confidentiality agreements, trade secrecy agreements or similar agreements intended to protect unpatented technology will provide the intended protection. Intellectual property litigation is extremely expensive and time-consuming, and it is often difficult, if not impossible, to predict the outcome of such litigation. A failure by Lattice to protect its intellectual property could have a materially adverse effect on its business and operating results and its ability to successfully compete in this industry.

Clinical trials may be required to develop products, gain market acceptance and obtain 510(k) certifications from the FDA and similar certifications in other jurisdictions. Lattice has several clinical trials planned and will likely undertake future trials. These trials often take two years to execute and are subject to factors within and outside of Lattice's control. The outcome of these trials is uncertain and may have a significant impact on the success of current and future products and future profits.

The manufacturing and marketing of biologic products, medical devices and coating technologies involves an inherent risk that Lattice's products may prove to be defective. In that event, Lattice may voluntarily implement a recall or market withdrawal or may be required to do so by a regulatory authority. A recall of one of its products, or a similar product manufactured by another manufacturer, could impair sales of the products Lattice markets as a result of confusion concerning the scope of the recall or as a result of the damage to Lattice's reputation for quality and safety.

Media reports or other negative publicity concerning both improper methods of tissue recovery from donors and disease transmission from donated tissue may limit widespread acceptance of Lattice's allografts. Unfavorable reports of improper or illegal tissue recovery practices, both in the United States and internationally, as well as incidents of improperly processed tissue leading to transmission of disease, may broadly affect the rate of future tissue donation and market acceptance of allograft technologies. Potential patients may not be able to distinguish Lattice's allografts, technologies and the tissue recovery and the processing procedures from those of competitors or others engaged in tissue recovery. In addition, families of potential donors may become reluctant to agree to donate tissue to for-profit tissue processors.

The markets for Lattice's products and services are characterized by rapid technological change, frequent new introductions, changes in customers' demands and evolving industry standards. Accordingly, Lattice will need to continue to innovate and develop additional products. These efforts can be costly, subject to long development and regulatory delays and may not result in products approved for sale. These costs may hurt operating results and may require additional capital. If additional capital is not available, Lattice may be forced to curtail development activities. In addition, any failure to react to changing market conditions could create an opportunity for other market participants to capture a critical share of the market within a short period of time.

The MD&A was authorized for issue by the Board of Directors on April 30, 2018.