## BIOCURE TECHNOLOGY INC.

## Management's Discussion & Analysis As at December 31, 2021

#### **INTRODUCTION**

The following management's discussion and analysis ("MD&A") is a review of operations, current financial position and outlook for the Company and is performed by management using the information available as at April 29, 2022 We have prepared this MD&A with reference to National Instrument 51-102F1 of the Canadian Securities Administrators. This MD&A should be read in conjunction with the Company's audited financial statements for the year ended December 31, 2021 and the related notes thereto ("Annual Financial Statements"). The Company's Annual Financial Statements are prepared in accordance with International Financial Reporting Standards ("IFRS"). All amounts are expressed in Canadian dollars unless otherwise indicated. The information contained herein is not a substitute for detailed investigation or analysis on any particular issue. The information provided in this document is not intended to be a comprehensive review of all matters and developments concerning the Company.

As used in this MD&A and unless otherwise indicated, the terms "we", "us", "our", "Company", and "CURE" refer to Biocure Technology Inc. Unless otherwise specified, all dollar amounts are expressed in Canadian dollars. This MD&A contains certain information forward-looking statements. Forward-looking statements may also be made in the Company's other reports filed with or furnished to the Canadian securities commissions. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from such statements. The words "aim," "anticipate," "believe," "continue," "could," "expect," "intend," "likely", "may," "optimistic," "plan," "potential", "predict", "should," "would," and other similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance, and therefore you should not put undue reliance upon them. The material assumptions supporting these forward-looking statements include, among other things the Company's ability to:

- obtain any necessary financing on acceptable terms;
- keep pace with rapid changes in consumer demands;
- rely on third party manufacturers;
- manage expansion effectively;
- enforce its intellectual property rights;
- launch additional product lines;
- retain its skilled personnel;
- manage current tax and regulatory regimes;
- manage the fluctuation in foreign currency exchange rates and interest rates; and
- follow general economic and financial market conditions.

Some of the factors that may cause actual results to differ materially from those indicated in these statements are found in the section "Risk Factors" in this MD&A.

The forward-looking statements contained in this MD&A reflect our views and assumptions only as of the date of this MD&A. The Company undertakes no obligation to update or revise any forward-looking statements after the date on which the statement is made, except as required by applicable laws, including the securities laws of Canada.

## **OUR BUSINESS**

Biocure Technology Inc. (the "Company") was incorporated under the Business Corporation Act (British Columbia) on August 24, 2007. The Company is engaged in a mineral exploration property project through a limited partnership. The Company is also engaged in developing and commercializing several biopharmaceutical technologies relating to uses of recombinant and ranibizumab. The Company's head office is located at Suite 300, 1055 West Hastings Street, Vancouver, BC, Canada.

On November 24, 2017, the Company acquired 100% of the issued and outstanding common and preferred shares of BiocurePharm Corporation ("BP Korea"), in exchange for the common shares of the Company (the "Transaction").

BiocurePharm Corporation (the "Company" or "Biocure"), a private corporation, was incorporated on August 29, 2005 under the laws of the Republic of Korea. The Company was established to develop and commercialize several Biosimilars and biopharmaceutical technologies for production of biopharmaceuticals in Korea and oversea countries. The Company's registered and head office is located at S-202, Pai Chai University Daedeok Campus, 11-3 Techno 1-ro, Yuseong-gu, Daejeon, Republic of Korea.

Established in 2005, Biocure is a biopharmaceutical company focused on developing biosimilars based on Recombinant Protein Technology, Cell Culture Technology, Protein Purification Technology, and Bio-processing Technology. Biosimilar is defined in Wikipedia as follows: "A biosimilar (also known as follow-on biologic or subsequent entry biologic) is a biologic medical product which is almost an identical copy of an original product that is manufactured by a different company. Biosimilars are officially approved versions of original "innovator" products and can be manufactured when the original patent expires."

Biocure has developed technology to produce three biosimilars such as Interferon-β, Ranibizumab and Filgrastim. Biocure is fully ready to proceed with preclinical and clinical tests for those three products whenever funds are available.

Even after the clinical test is done and products are approved, one of the biggest difficulties and risks to a biopharmaceutical company is gaining a commercial manufacturing facility. Currently, the Company has access to a third-party Good Manufacturing Practice facility ("GMP facility") in Korea to minimize upfront capital requirements as well as investment risks for the commercialization of its products.

Korean government believes the biopharmaceutical industry will drive the nation's growth for the next generation. As a part of its initiatives, Korean government and Daejeon municipality government have invested 25 billion South Korean Wons ("KRW") in total, 12 billion for the Fermentation & Purification process and 13 billion for the Fill & Finish process, to build a GMP facility in 2011 to support venturous biopharmaceutical companies, who lack finances to materialize commercial productions. The GMP facility is equipped with complete lines of the Fermentation & Purification process and the Fill & Finish Packaging process.

The GMP facility has sufficient capacity to commercially manufacture, and package biopharmaceuticals based on recombinant bacteria, Interferon- $\beta$ , Ranibizumab, Filgrastim, and Recombinant growth factor. For example, Biocure could produce Interferon- $\beta$  at this facility by 4.8 million vials per year. The world consumption of Interferon- $\beta$  is estimated about 20 million vials a year, so the production from this facility could cover about 24% of world consumption.

Biocure has a right to use this GMP facility at any time on a long-term lease or on a fee basis. Since the GMP facility is a state-run non-profit organization, the terms and conditions are very favorable to Biocure.

The risks to produce and market biosimilars are time and cost until preclinical test, clinical test, product approval and registration process are complete. In order to mitigate these risks, Biocure is in discussion with parties in the countries, who are in serious need for biosimilars that Biocure has technology to produce. Those countries have many patients suffering from diseases that could be treated by Biocure's products, but original products from multinational pharmaceutical firms are too expensive for those patients to access due to the high pricing policy with a patent. Biosimilars could solve such problems and be available at much more affordable prices.

Biocure is offering one-stop solution to those countries, i.e. Collaboration on the implementation of preclinical and clinical test, technology transfer to produce biosimilar, GMP facility design & manufacturing equipment selection, entire quality control process for the final products and so on. By this scheme, Biocure could mitigate risks significantly to enter into new markets with its biosimilar technology. Working with local partners in those countries could significantly reduce financial and marketing risks. In addition, Biocure should be able to get a technology transfer fee as well as a license fee or royalty from the partners upon commercial production

Biocure does not have a positive cash flow and focus on the clinical trial for CAR T Cell Therapy in Korea to expedite the first commercialization of its products.

## PRODUCT PORTFOLIO

## 1. Interferons- β

Interferons ("IFNs") are a group of signaling proteins made and released by host cells in response to the presence of several pathogens, such as viruses, bacteria, parasites, and also tumor cells. In a typical scenario, a virus-infected cell will release interferons causing nearby cells to heighten their anti-viral defenses. IFNs belong to the large class of proteins known as cytokines, molecules used for communication between cells to trigger the protective defenses of the immune system that help eradicate pathogens. Interferons are named for their ability to "interfere" with viral replication by protecting cells from virus infections. IFNs also have various other functions: activate immune cells, such as natural killer cells and macrophages; increase host defenses by up-regulating antigen presentation by virtue of increasing the expression of major histocompatibility complex (MHC) antigens. Certain symptoms of infections, such as fever, muscle pain and "flu-like symptoms", are also caused by the production of IFNs and other cytokines. More than twenty distinct IFN genes and proteins have been identified in animals, including humans. They are typically divided among three classes: Type I IFN, Type II IFN, and Type III IFN. IFNs belonging to all three classes are important for fighting viral infections and for the regulation of the immune system.

The IFN- $\beta$  proteins are produced in recombinant bacteria and animal cell. They have antiviral activity that is involved mainly in innate immune response. Two types of IFN- $\beta$  have been described, IFN- $\beta$ 1 (IFNB1) and IFN- $\beta$ 3 (IFNB3). IFN- $\beta$ 1 is used as a treatment for multiple sclerosis as it reduces the relapse rate. IFN- $\beta$ 1 is not an appropriate treatment for patients with progressive, non-relapsing forms of multiple sclerosis.

The originator of Interferon beta was Schering AG (Berlex in North America), now part of Bayer HealthCare, and the patent expired in 2010. Currently, EMD Serono Canada Inc., Bayer HealthCare, and Biogen are manufacturing Interferon beta.

The total world market size of multiple sclerosis is worth 24.8 billion USD by 2024 (Source:https://www.thepharmaletter.com/article/multiple-sclerosis-therapeutics-market-to-be-worth-24-8-billion-by-2024) and Interferon-β in 2015 was U\$6.3 billion USD (Source: http://www.researchandmarkets.com/reports/2221752/interferon\_market\_forecast\_to\_2015.pdf).

Dr. Sang Mok Lee, the CEO of Biocure, completed a preclinical test for this product earlier in 2001 before he established Biocure, but he could not complete a clinical test due to a small number of patients in Korea at that time. Biocure completed another preclinical test in 2008, but again could not advance to a clinical test due to lack of funds.

Biocure has completed with a preclinical test again in Korea in 2019, as Interferon-beta shall be the first one to be commercialized out of Biocure's product portfolio. . Since Korea does not have a sufficient number of patients for a clinical test, Biocure will submit the application to Korea FDA for the implementation of clinical test in other countries with more patients. Upon the consent from Korea FDA, Biocure plans to carry out a clinical test in Europe or Canada, subject to fund availability. . The estimated cost of preclinical and clinical test would be KRW 3 Billion, but it can vary depending on the rules and regulation of authorities in each country. The cost estimation is under progress.

Once clinical test in another country is complete, Biocure shall be able to obtain a product registration from Korea FDA with such clinical test results. An approval from Korea FDA will allow Biocure to start commercial production in Korea and export to other countries. In order to market this product to other countries such as Europe or Canada, a similar product registration procedures should be taken with local authorities. However, it would be much quicker and easier with an approval from Korea FDA. Instead of a full scale of clinical test results, a Bridge Test or a Racial Difference Test could be acceptable to obtain a product registration.

Biocure plans to generate revenue by manufacturing Interferon-beta at the GMP facility in Korea and exporting to overseas where products are registered. The ultimate plan of Biocure is building a local GMP facility in those countries through the Joint Venture with reliable local partners who are willing to finance the construction of GMP Facility. Then, Biocure could secure a stable cash flow from technology transfer fees, royalties and dividends.

#### 2. Ranibizumab

Ranibizumab is used for treating macular degeneration. It is also used to treat a type of eye problem known as macular edema. Ranibizumab (trade name Lucentis among others) is a monoclonal antibody fragment (Fab) created from the same parent mouse antibody as bevacizumab. It is an anti-angiogenic that has been approved to treat the "wet" type of age-related macular degeneration (AMD, also ARMD), a common form of age-related vision loss.

Its effectiveness is similar to that of bevacizumab. Its rates of side effects also appear similar. However, ranibizumab typically costs \$2,000 a dose, while the equivalent dose of bevacizumab typically costs \$50.

Ranibizumab was developed by Genentech and is marketed in the United States by Genentech and elsewhere by Novartis, under the brand name Lucentis, and the patent expired in 2017. The total market size of Lucentis is estimated US\$4.3 billion in 2013.

The number of patients who need Ranibizumab in Korea is on the rise and its annual growth rate is 38%, the world's highest. (Source: Statistic Bureau, MIC; Ministry of Health, Labour and Welfare, United Nations) The average market price is known to be US\$1,200 per vial. (Source: https://www.drugs.com/price-guide/lucentis) Due to its high price, Medical Service Plan or National Health Insurance Program has a limit to cover the cost for the needed patients and very few patients receive benefits for this medicine.

When Biocure manufactures this product at the GMP facility in Korea, the expected selling price could be reduced to less than 50% of the current market price, if required. The price competitiveness of a biosimilar against the original product is generally very high. Since the Korean market for this product is growing fast, its commercial production in Korea could bring the Company good cash flows and a high chance to enter into the overseasmarket.

### 3. Filgrastim

Filgrastim is used to treat neutropenia, a lack of certain white blood cells caused by cancer, bone marrow transplant, chemotherapy, or by other conditions. It is a type of anti-cancer treatment which plays an important role for recovery of immunity for cancer patients.

The original product developer was Amgen, USA and its patent expired in 2013. Therefore, many biosimilar producers exist throughout the world already.

With the completion of product development, Biocure can start preclinical tests at any time. But the Company is evaluating a right timing to start due to its priority against other products of the Company, considering of limited fund availability and financial constraints.

The Company plans to start a preclinical and clinical test in Korea first and collaborate with local parties in other countries, whoever the Company could enter into an agreement with first.

When Biocure discusses about biosimilar technology transfer or GMP facility JV, Filgrastim is included in the target product portfolio for local manufacturing.

## 4. CAR T Cell Therapy

The Company through its wholly owned subsidiary BiocurePharm Corporation ("Biocure Korea") has entered into a joint R&D agreement with Pharos Vaccine Inc. dated November 30, 2017 for the purpose of carrying out research and development activities relating to the commercialization of anti-CD19 CAR-T (Chimeric Antigen Receptor T Cell) and for the pursuit of pre-clinical and clinical trials.

In August 2017, Novartis Pharmaceuticals Corp. was the first company to obtain FDA approval for gene immune-therapy in the United States with its product "Kymriah", which is for usage in treatment of pediatric and young adult patients with a form of acute lymphoblastic leukemia. Kymriah is a CAR-T cell therapy product. In October 2017,

Gilead Sciences Inc. received FDA approval for its lymphoma product "Yescarta" another CAR-T cell therapy product used to treat adult patients with certain types of non-Hodgkin lymphoma.

The market for CAR-T Cell therapies is expected to grow steadily till 2028 by 53.9% of annual growth rate and reach U\$8.3 Billion in value. (Source: Coherent Market Insight, CAR-T Cell Therapy Market, 2017. 2)

Chimeric Antigen Receptor modified T cell immunotherapy, so called, CAR-T Cell Therapy, is one of the most competitive and advanced treatments for Acute Lymphoblastic Leukemia (ALL). Specific antigen receptor of CAR-T cell is made by use of virus vector after extracting T cell from patient bloods, and re-infuse to patient. Within the patient's body, the CAR-T cells have the potential to recognize the cancer cells and other cells expressing a specific antigen and attach to them, which may initiate direct cell death.

Relapsed and refractory acute lymphoblastic leukemia (ALL) remains to be a significant cause of cancer associated morbidity and mortality for children and adults. CAR-T cell therapy, as one of the most promising targeted immunotherapies, has drawn extensive attention and resulted in multiple applications. Biocure Korea have established pre-clinical and clinical designs of 2nd generation CAR-T cell immunotherapy in 2017: standard protocol for conditioning and infusion, better control of complications, and combination with other therapeutic options and etc. On July 5, 2018, the Company's wholly owned subsidiary, BiocurePharm Corp. (BP Korea), has started conducting a preclinical trial of its CAR-T cell. On October 16, 2018, the Company released successful results of the preclinical trial of its CAR-T cell. Achievements have made by the Company up to date are including, but not limited to, Clinical trial protocol, Construction of master cell bank, Establishment of manufacturing process, Stability test, Establishment of quality control, Specification and Assay. GMP documentation, Validation of manufacturing process, Validation of Quality control and quality assurance, CMC assay for clinical trial samples, documentation for clinical trial applicant and so on.

It is expected to help a lot of leukemia patients. According to the NIH, more than 340,000 people in the U.S. suffered from leukemia in 2015. Global CAR-T Cell therapeutics market was \$72 million in 2017. In the next 11 years (from 2017~2028), the annual growth rate will steadily increase to 53.9%. (Coherent Market Insights, CAR-T Cell therapy market (2017.2)) CAR-T Cell therapeutics is expected to generate huge revenue opportunities in commercial.

The Company is in a middle of Investigational New Drug (IND) application process with Korean FDA and expect to start clinical trials in Korea within the first quarter of 2021. Two major hospitals in Seoul, Korea shall be the place for clinical trial.

## 5. Foot-and-mouth Disease (FMD) Vaccine

Pharos Vaccine Inc. has succeeded in developing an advanced recombinant vaccine using E. coli instead of producing the vaccine through existing cell culture. Pharos Vaccine has the ability to manufacture customized vaccines that match foot-and-mouth disease virus types. It uses Escherichia coli for production and its production cost is much less than that of cell culture, therefore it would be able to produce the large quantities within a shorter period at much more affordable price.

Pharos Vaccine Inc. does not have sufficient resources to manufacture any products at commercial scale despite its own innovative technology. Pharos mainly focuses on research & development and does not have any marketing experience or resources in the international market. Therefore, Biocure and Pharos have agreed to cooperate to enter into overseas markets through Biocure's international business expertise and Biocure's accessibility to a GMP facility for biosimilars.

Pharos Vaccine Inc. has developed Foot-and-Mouth Disease (FMD) vaccine in 2015 and Biocure has a license agreement with Pharos to produce and market FMD vaccine to Korea and overseas, except China for 10- years from the product registration date.

The Korean Foot-and-Mouth Disease (FMD) vaccine market is worth about KRW60 billion a year. Merial, a UK based multinational pharmaceutical company, provides bulk vaccine to six local animal vaccine manufacturers in Korea. The six local manufacturers repack the vaccines under their own brands and ship them to the Korean Public Procurement Services.

The advantage of the Pharos Vaccine is that it can easily manufacture all different vaccines for the known seven virus types by changing epitopes. On the other hand, Merial's vaccines are effective in only three types of viruses, which means Merial's vaccines are not effective in the other four types of viruses. As Merial's products are through animal cell culture process, it would take Merial much longer to produce new vaccines for the other four type of virus.

Biocure will bear all costs and expenses after the transfer of technology. In other words, all the burdens that arise in the self-domain are the principle of the parties.

For overseas markets, Biocure has a manufacturing and marketing right to any countries in the world for 10 years from the product registration date except China where Pharos appointed another Chinese firm as a partner for the Chinese market. Biocure will be responsible for all costs and expenses for business after the transfer of Pharos's technology.

Pharos obtained an approval from Korean Government Authorities for manufacturing FMD Vaccine in December, 2019 and work on planning of mass production in Korea.

Biocure is researching overseas markets such as Brazil, Colombia and Turkey where a number of livestock vulnerable to FMD such as beef, cattle, and pig are raised. Biocure should be able to export vaccines to those countries from the veterinary GMP plant in Korea upon the product registration in respective countries. Setting up a local plant could be an option, if the regional market is big enough.

## 6. Hair Growth Agent

Biocure has a technology to produce growth factors through Recombinant Protein Process. Growth factors were identified from stem-cell culture technology and have been well-known as a great effect on hair growth, skin revitalization, wrinkle removal, and wound healing. Special functional cosmetics using growth factor have already been popular by many cosmetic companies in the market, but products that are applied as hair growth stimulant have not been introduced yet.

This product is a functional hair growth solution originating from ADSC (adipocyte stem cells) and has been under development since 2012. The major components of this product are five types of growth factors such as IGF (Insulinlike Growth Factor), VeGF (Vascular endothelial Growth Factor), TGF (Transforming Growth Factor), EGF (Endothelial Growth Factor), and FGF (Fibroblast Growth Factor).

IGF is part of a complex system that cells use to communicate with their physiologic environment. VeGF is a signal protein produced by cells that stimulates vasculogenesis and angiogenesis. It is part of the system that restores the oxygen supply to tissues when blood circulation is inadequate such as in hypoxic conditions. TGFs are multifunctional cytokines that regulate cell proliferation, growth, differentiation and motility, as well as synthesis and deposition of the extracellular matrix.

EGF has a profound effect on the differentiation of specific cells in vivo and is a potent mitogenic factor for a variety of cultured cells of both ectodermal and mesodermal origin.

FGF involved in angiogenesis, wound healing, embryonic development and various endocrine signaling pathways. The FGFs are heparin-binding proteins and interactions with cell-surface-associated heparan sulfate proteoglycans have been shown to be essential for FGF signal transduction. FGFs are key players in the processes of proliferation and differentiation of wide variety of cells and tissues.

Five main growth factors have been developed in 2017.

Biocure has applied these Growth Factors to cosmetic products so that no clinical test would be required. Biocure is considering a spin-off of this product line to maximize the efficiency of business and concentrate on CAR T Cell and other Biosimilars.

## **CORPORATE UPDATES**

On November 30, 2017, the Company's wholly owned subsidiary, BiocurePharm Corporation, entered into a joint R&D agreement (the "Agreement") with Pharos Vaccine Inc. ("Pharos") for the purpose of carrying out research and development activities relating to the commercialization of anti-CD19 CAR-T (Chimeric Antigen Receptor T Cell) and for the pursuit of pre-clinical and clinical trials.

Pursuant to the Agreement, Biocure Korea will fund all fees and expenditures throughout all stages until product registration and commercial sales license are obtained and is setting up a GMP (Good Manufacturing Practice) Facility to manufacture products and will perform worldwide marketing except in China. Pursuant to the Agreement, Pharos will provide a license for the use of its technology, prepare products for pre-clinical & clinical trial and address all technology-related activities until product registration and conditional commercial sales license are obtained. Additionally, Biocure Korea shall pay to Pharos Technology License Fees in the aggregate amount of 3.8 billion Korean won, of which 500 million Korean won shall be paid in five equal installments over the first year of the Agreement, 300 million Korean won will be paid once the application for phase 1 clinical trials are approved, 1 billion Korean won will be paid once the phase 2 clinical trials are completed and the final 2 billion Korean won will be paid once the phase 2 clinical trials are completed. Biocure Korea will also pay certain sales linked technical fees from sales of the product developed.

Any technical achievements or outcomes completed under the Agreement shall belong to both parties as joint intellectual property and cannot be sold or transferred to the third party without consent of the other party. If there is any profit generated from such intellectual property, it shall be equally shared by both parties, subject to the sales linked technical fees.

Pursuant to the Agreement, Biocure Korea is obligated to set up GMP Facilities in the second half of 2018 to manufacture Pharos' Lentivirus which is a lentivirus vector for manufacturing anti-CD19 CAR-T-cell. It is a non-replicative viral vector of high-efficiency gene that has been independently researched and developed by Pharos. The facility is to be transferred to Pharos at it requires subject to negotiations regarding the value of such facility.

The Agreement has a 15-year term. Each of Biocure Korea and Pharos have been selected by the Ministry of Health and Welfare in Korea as a Project for CIDD (Consulting for Innovative Drug Development) Program by which the companies could receive financial aids and government policy supports from Korean Government in developing innovative drugs such as CAR T Cell.

On June 18, 2018, the Company began trading on OTCQB under the symbol BICTF.

On July 5, 2018, the Company's wholly owned subsidiary, BiocurePharm Corporation (BP Korea), has started conducting a preclinical trial of its CAR-T cell.

Furthermore, the Company has announced that BP Korea has successfully developed a GMP (good manufacturing practice) manufacturing of viral vectors as MCB (master cell bank) in Korea and successfully completed the efficacy and toxicity test.

On July 18, 2018, the Company's wholly owned subsidiary, BiocurePharm Corporation (BP Korea), has implemented the preclinical trial of interferon beta 1b since late 2017 and is pleased to update shareholders on its progress. BP Korea announces that it has completed most of the toxicity testing and has developed MCB (master cell bank) and WCB (working cell bank). Currently, BP Korea is in the middle of an in vivo potency test. The Company has already produced 35,000 vials of interferon beta 1b for its preclinical trial and stability test at the GMP manufacturing facility in Korea. BP Korea expects the preclinical trial shall be completed by the end of Q1 2020 and will advance to clinical trial in Q3 2020.

On October 16, 2018, the Company released successful results of the preclinical trial of safety and toxicity of CAR-T cells-based treatment for Acute Lymphocytic Leukemia. The trial results demonstrated a complete remission of the cancerous cells within 7 and 28 days from the injection of reengineered CAR-T cells into a mouse. The study further showed encouraging results as no toxicity symptoms have risen from the high-volume injection.

In 2018, the Company has successfully completed the safety test of a Biodistribution analysis study and toxicity study for single dose intravenous injection as per the Korea FDA guidelines. This milestone allows BioCure to advance into the actual production of anti-CD19 CAR-T Cell for a clinical trial. The Company has already contracted CdmoGen Co. Ltd. and Master Cell Bank to produce a Lentiviral Vector under GMP standards necessary for advancing to the next stage of CAR-T Cell based clinical trials.

On January 14, 2019, Biocurepharm Corporation ("BPK"), a wholly owned subsidiary of the Company entered into a collaboration agreement with Y Biologics ("YB"), a private R&D company in Korea that specialized in antibody therapeutics in cancer, autoimmune disease and metabolic disease. The purpose of this agreement is to research the effectiveness of combined treatment of Immune Checkpoint Inhibitor PD-1 (Programmed Cell Death Protein-1) developed by YB and anti-CD 19 CAR T-Cell Therapy developed by BPK. BPK and YB believe that the above combined treatment could maximize anticancer effects and eventually develop a next generation anticancer treatment for solid tumors.

BPK and YB agreed to collaborate in the following areas to verify combined therapy of YBL-006 and anti-CD19 CAR T-cell therapy;

- a. Plan and implement pre-clinical trial(animal) for combined therapy;
- b. Conduct a study of action mechanism and bio marker of combined therapy;
- c. Development of anticancer treatment and exchange of information; and
- d. And other essential items to fulfill the intended goal of the agreement.

On February 7, 2019, the Company received Depository Trust Company ("DTC") eligibility.

On May 16, 2019, BPK entered into an agreement with Pharos for the development of overseas market of CAR-T-cell products on an exclusive basis. The two companies will work together in developing anti-CD19 CAR-T-cell therapy products, conducting preclinical and clinical trials, and commercializing anti-CD19 CAR-T-cell therapy products overseas to treat leukemia and lymphoma patients. Some of the highlights of collaborative research and development work scopes in the agreement include:

- 1. Manufacture products for preclinical trial of contract product;
- 2. Preclinical trial of contract product;
- 3. Manufacture three batches of test product for clinical trial application of contract product;
- 4. Application for clinical trial of contract product;
- 5. Manufacture product for clinical trial of contract product;
- 6. Clinical trial of the contract product;
- 7. Establishment of manufacturing technology and SOP of contract product;
- 8. Establishment of quality control test method and SOP of contract product;
- 9. Preparation of safety/efficacy data of contract product;
- 10. Establishment and operation of GMP (good manufacturing practice) facility of contract product;
- 11. Biologics licence application (BLA) of contract product;
- 12. Obtaining the product registration and (conditional) sales permit for contract product.

Pharos and BPK agreed on the exclusive manufacturing and marketing rights of anti-CD19 CAR-T-cell products for 15 years from the starting date of sales in the markets. The territories BPK shall have exclusive rights under this agreement are all the countries, except China.

During the year ended December 31, 2021, the Company received notification of termination of research agreement with Pharos due to lack of payment by the Company. Pharos terminated the contract with \$Nil owing by the Company.

Also during the year ended December 31, 2021, the accounts payable of KRW 2,827,667,497 was forgiven as the Company's relationship with Pharos Vaccine Co. Ltd. was terminated

On October 17, 2019, BPK has appointed CLIPS (Clinical Professional Services) as the CRO (Contract Research Organization) to proceed with a Clinical Trial for CAR-T products in Korea. After reviewing multiple competent

CRO's in Korea and multiple meetings with them, BPK has selected CLIPS who has outstanding experience as well as expertise in gene therapies and cell therapies. In addition, their knowledge on the clinical trials convinced BPK it could achieve a successful clinical trial for CAR-T products within the given timeline.

#### **Key Management Change**

Effective February 16, 2021, Mr. Berkan Unal joined the Board of Directors as an Independent Director. He replaced Mr. Hans Frykman.

Effective July 22, 2021, Dr. Bjorn Cochlovius has joined the Board of Directors as President.

#### **Equity**

During the year ended December 31, 2021, the Company closed a non-brokered private placement consisting of 6,706,525 shares at a price of \$0.16 per unit for gross proceeds of \$1,073,044. Each Unit is comprised of one common share and one share purchase warrant of the Company. Each share purchase warrant entitles the holder to purchase additional common share of the Company at \$0.21 per common share until July 14, 2022.

During the year ended December 31, 2020, the Company issued 1,786,725 Units at a price of \$0.14 per Unit for gross proceeds of \$250,142 in a non-brokered private placement. Each Unit is comprised of one common share and one share purchase warrant of the Company, where each whole share purchase warrant entitles the holder to purchase one additional common share of the Company at \$0.21 per common share until October 14, 2022. The Company also paid \$3,360 and issued 24,000 share purchase warrants as finder's fees. Each share purchase warrant of the finder's fee entitles the holder to purchase one common share of the Company at \$0.21 per common share until October 14, 2021.

During the year ended December 31, 2020, the Company issued 1,000,000 common shares to settle debt in the amount of \$300,000 owed pursuant to a consulting agreement. The fair value of the shares was \$0.18 on the date of issuance, and therefore, the Company recognized a gain on debt settlement of \$120,000.

During the year ended December 31, 2020, the Company issued 190,907 shares at a fair value of \$0.22 per share to settle accounts payable of \$42,000.

#### Loans

Loans Payable

The following table summarizes the principal and interest amount in loans payable:

	December 31, 2021	December 31, 2020
Loans payable, unsecured:	\$	\$
Non-interest bearing, unsecured and due on demand (Note 11)	47,000	47,000
Non-interest bearing, unsecured and due on demand	40,411	-
Interest at 2.0% per annum, unsecured and due on demand	139,226	140,724
Interest at 4.6% per annum, unsecured and due on demand (Note 11)	463,627	348,957
Interest at 5% per annum, unsecured and due on demand	254,749	266,087
Interest at 10% per annum, unsecured and due on demand	252,327	250,309
Interest at 3.3% per annum	1,334,969	-
Total	2,532,309	1,053,077

During the year ended December 31, 2021, the Company recorded interest expense of \$68,358 (2020 - \$48,238).

Long-term Loans Payable

	December 31, 2021	December 31, 2020
	\$	\$
Balance, beginning	1,586,922	1,498,500
Additions - CEBA	-	29,222
Repayments	(86,609)	-
Accretion - CEBA	4,967	-
Reclassified as current	(1,334,974)	-
Effect of foreign exchange	(136,117)	59,200
Balance, ending	34,189	1,586,922

During the year ended December 31, 2020, the Company entered into a Canada Emergency Business Account "CEBA" loan with the Government of Canada. The loan is an interest free loan of \$60,000 from the Government of Canada. If the Government of Canada is repaid by December 31, 2022, 33% being \$20,000 will be forgiven. If the Company is not able to repay, the loan will convert into a regular loan with a three-year term at 5% per annum. The loan was recorded at a fair value of \$29,222 using an effective rate of 17%, considering the grant, the interest-free loan and the forgivable portion. The residual value of \$31,662 is recorded as income from government assistance in other income. During the year ended December 31, 2021, the Company recorded accretion expense of \$4,967 (2020 - \$Nil).

During the year ended December 31, 2018, the Company assumed a loan payable to the Industrial Bank of Korea ("IBK") to fund the land purchase agreement with KLHC.

The loan terms are as follows:

- Interest rate of 3.3% per year;
- Loan amount shall consist of 5 instalments of \$403,920 (KRW 330,000,000) and the sixth instalment of \$410,040 (KRW 335,000,000) starting on June 12, 2019 where the balance shall be covered by the Company;
- The Company shall pay interest only for the first 3 years and principle plus interest for the following 5 years; and
- If the Company defaults and does not proceed with land purchase, IBK shall be paid by KLHC.

During the year ended December 31, 2021, the Company recorded interest expense of \$46,825 (2020 - \$49,969).

Subsequently, on March 25, 2022, the agreement with KLHC, was terminated and KLHC directly repaid the outstanding loan from Industrial Bank of Korea. As at December 31, 2021, this loan was reclassified as current.

## LAND DEPOSIT

During the year ended December 31, 2017, the Company entered into an agreement with Korea Land & Housing Corp. ("KLHC") to acquire land for the purpose of constructing a research and development facility. The title of the land transfers to the Company upon completion of the scheduled payments.

The payment schedule is as follows:

Date	KRW	\$
December 12, 2017 (paid)	281,395,000	344,427
June 12, 2018 (paid)	422,555,000	517,207
December 12, 2018 (paid)	422,000,000	516,528
June 12, 2019 (paid)	422,000,000	516,528
December 12, 2019 (paid)	422,000,000	516,528
June 12, 2020 (partially paid <sup>1</sup> )	427,908,000	500,652
December 12, 2020	429,405,230	502,404
	2,827,263,230	3,414,274

of which KRW 24,110 (\$26) was paid for the year ended December 31, 2021.

The title of the land transfers to the Company upon completion of the scheduled payments. During the reporting period, the Company was in arrears for the remaining payments that are required to complete the purchase. As of December 31, 2021 KRW 843,975,890 in principal payments and KRW 13,313,230 of interest payments were outstanding.

The Company did not make the required payment during the year ended December 31, 2021 and was in default of the agreement and impaired the initial payment of KRW 281,395,000 during the year ended December 31, 2021.

Subsequent to the year ended December 31, 2021, on March 28, 2022, the agreement with KLHC, was terminated and the initial payment of KRW 281,395,000 was forfeited and the Company received KRW 505,015,574 after KLHC directly repaid and deducted against the outstanding loan from Industrial Bank of Korea, included in the amount received were interest of \$88,040 (KRW 80,328,138) accrued to December 31, 2021 and \$7,558 (KRW 6,895,852) for the period from January 1, 2022 to March 28, 2022.

#### OVERALL PERFORMANCE

Since its inception in August 2005, Biocure has accumulated a deficit of \$26,082,370 (December 31, 2020 - \$25,071,293). The Company started generating revenue from its commercial platform during the year ended December 31, 2021, but near-term profitability is not expected. Biocure expects its operating losses to continue in the next fiscal year as it builds its commercial platform and invests in its product development, with primary focus for the next two years on Biopharmaceutical Production project and FMD production project.

The Company has funded its operations with proceeds from loans payable, equity financings, and expects to seek additional funding through equity financings to finance its product development, and corporate growth. However, if Biocure's product development and commercial activities do not show positive progress, or if capital market conditions in general or with respect to the life sciences sector or development stage companies such as Biocure are unfavorable, its ability to obtain additional funding will be adversely affected.

## **SELECTED FINANCIAL INFORMATION**

The following table provides selected financial information for the three months and years ended December 31, 2021 and 2020. The selected financial information set out below has been derived from the consolidated financial statements and accompanying notes, in each case prepared using accounting policies consistent with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and Interpretations of Financial Reporting Interpretations Committee ("IFRIC"). The selected financial information set out below may not be indicative of the Company's future performance. The following discussion should be read in conjunction with the Consolidated Financial Statements for the year ended December 31, 2021.

Functional and presentation currency

The consolidated financial statements of the Company are presented in Canadian dollars.

The individual financial statements of each entity of the Company are presented in the currency of the primary economic environment in which the entity operates. The financial currency of the Company is the Canadian dollar. The functional currency of the subsidiary is the South Korea won. The figures presented are in Canadian dollars, unless noted otherwise.

Three months ended December 31, 2021, compared to the three months ended December 31, 2020.

	2021	2020
	\$	\$
EXPENSES		
Accretion	1,327	883
Amortization and depreciation	11,579	21,739

Consulting	(63,964)	98,700
Director and management fees	68,488	19,200
Filing fees	13,690	5,437
General and administrative	2,916	(1,415)
Interest	353,261	114,848
Loss on inventory disposal	-	13,430
Insurance	6,574	-
Motor vehicle expenses	487	15,647
Payroll	89,188	219,203
Professional fees	6,438	7,514
Rent	5,877	(7,940)
Research and development	72,568	1,252,791
Share-based compensation	(758,709)	-
Supplies	1,031	5,230
Travel and entertainment	(7,212)	15,985
Utilities	719	829
Total Expenses	(195,742)	1,782,081
INCOME (LOSS) BEFORE OTHER ITEMS	195,742	(1,782,081)
OTHER ITEMS		
Finance costs	_	_
Foreign exchange loss	(23)	10,066
	88,042	· · · · · · · · · · · · · · · · · · ·
Interest income		1,911
Forgiveness of loan	3,473,705	-
Impairment of land deposit	(308,409)	-
Loss on change in fair value of convertible debt	(5,459)	-
Income from government assistance	-	31,662
Forgiveness of loan interest	-	94,353
Gain on settlement of debt	-	120,000
(Loss) gain on valuation of marketable securities	(1,500)	973
·	3,246,356	258,965
NET LOSS FOR THE YEAR	3,442,098	(1,523,116
Loss attributable to the shareholders of the Company	3,201,184	(1,459,450)
Loss attributable to non-controlling interest	240,914	(63,666)
OTHER COMPREHENSIVE INCOME (items that may be reclassified to profit or loss)	(33,466)	(96,131)
Attributable to the shareholders of the Company	(32,228)	(92,113)
Attributable to non-controlling interest	(1,238)	(4,018)
COMPREHENSIVE LOSS	(3,408,632)	(1,619,247)
Attributable to the shareholders of the Company	(3,168,956)	(1,551,562)
Attributable to non-controlling interest	(239,676)	(67,685)
BASIC AND DILUTED LOSS PER SHARE (attributable to the owners of the parent)	\$ (0.03)	\$ (0.02)
WEIGHTED AVERAGE SHARES OUTSTANDING - BASIC AND DILUTED	106,626,286	96,937,001
	,,	, , - 0 1

## **Expenses**

Recovery for the three months ended December 31, 2021 was \$195,742 and expenses for the three months ended December 31, 2020 was \$1,782,081. The increase was primarily due to:

- Accretion: Increased by \$444 from \$883 during the three months ended December 31, 2020 to \$1,327 during the current quarter.
- Amortization and depreciation expense: Decreased by \$10,160 from an expense of \$21,739 during the three months ended December 31, 2020 to and expense \$11,579 during the current quarter.
- Consulting: Decreased by \$162,664 from \$98,700 during the three months ended December 31, 2020 to recovery of \$63,964 during the current quarter. The decrease is mainly due to reclassification of director fees and finder's fee that were previously recorded in consulting fee.
- Director and management fees increased by \$49,288 from \$19,200 during the three months ended December 31, 2020 to \$68,488 during the current quarter.
- Filing fees: Increased by \$8,253 from \$5,437 during the three months ended December 31, 2020 to \$13,690 during the current quarter.
- General and administrative: Increased by \$4,331 from recovery of \$1,415 during the three months ended December 31, 2020 to \$2,916 during the current quarter. The increase reflects an increase in activity in the development of the Company's pharmaceutical products.
- Interest expense: Increased by \$238,413 from \$114,848 during the three months ended December 31, 2020 to \$353,261 during the current quarter. The increase is due to higher short-term borrowings in the current quarter.
- Insurance expense increased by \$6,574 from \$Nil during the three months ended December 31, 2020 to \$6,574 during the current quarter.
- Payroll: Decreased by \$130,015 from \$219,203 during the three months ended December 31, 2020 to \$89,188 during the current quarter. The decrease is due to the resignation of a director and employees.
- Professional fees: Decreased by \$1,076 from \$7,514 during the three months ended December 31, 2020 to \$6,438 during the current quarter.
- Research and development: Decreased by \$1,180,223 from \$1,252,791 during the three months ended December 31, 2020 to \$72,568 during the current quarter. The decrease is due to reduced corporate activities.
- Travel and entertainment: Decreased by \$23,197 from \$15,985 during the three months ended December 31, 2020 to recovery of \$7,212 during the current quarter. The decrease is due to less travelling as a result of COVID-19 restrictions and reclassification of payroll remittances from welfare expenses to payroll expenses.
- Share-based compensation: Decreased by \$758,709 from \$Nil during the three months ended December 31, 2020 to \$758,709 during the current quarter due to recalculation of warrants reserve under residual method.

### Other income

Other income for the three months ended December 31, 2021 and 2020 were \$3,246,356 and \$258,965 respectively. The increase was primarily due to:

- Interest income: Increased by \$86,131 from \$1,911 during the three months ended December 31, 2020 to \$88,042 during the current quarter due to interest charged on land principals held by from Korea Land & Housing Corp.
- Forgiveness of loan: Increased by \$3,473,705 from \$Nil during the three months ended December 31, 2020 to \$3,473,705 during the current quarter due to the accounts payable to Pharos being forgiven.
- Impairment of rent deposit: Increased by \$308,409 from \$Nil during the three months ended December 31, 2020 to \$308,409 during the current quarter as the agreement with KLHC was terminated and the initial payment of KRW 281,395,000 was forfeited.
- Loss on valuation of marketable securities: Increased by \$2,473 from income of \$973 during the three months ended December 31, 2020 to \$1,500 during the three months ended December 31, 2021

### Other comprehensive income (loss)

Other comprehensive income for the three months ended December 31, 2021 was \$33,466, compared to the comprehensive loss of \$96,131 during the three months ended December 31, 2020. The change was due to foreign currency translation.

# Year ended December 31, 2021, compared to the year ended December 31, 2020.

	2021	2020
	\$	\$
EXPENSES	4.067	002
Accretion	4,967	883
Amortization and depreciation	76,878	54,899
Consulting Director and management food	277,679	384,700
Director and management fees	240,526	72,853
Filing fees	62,046	31,127
General and administrative	46,561	82,299
Insurance	28,455	220.240
Interest	493,921	239,240
Loss on inventory disposal	2 170	6,742
Motor vehicle expenses	3,170	17,559
Payroll	291,583	480,018
Professional fees	92,041	123,216
Rent	56,122	50,928
Research and development	1,476,365	1,555,334
Share-based compensation	1,164,951	109,253
Supplies	13,889	16,598
Travel and entertainment	60,428	108,245
Utilities Total Expenses	4,453 <b>4,394,035</b>	4,057 <b>3,337,951</b>
Total Expenses	4,394,033	3,337,931
LOSS BEFORE OTHER ITEMS	(4,394,035)	(3,337,951)
OTHER ITEMS		
Finance costs	-	-
Foreign exchange gain (loss)	(23)	9,786
Impairment of land deposit	(308,409)	-
Loss on change in fair value of convertible debt	(5,459)	-
Income from government assistance	-	31,662
Recovery of uncollectable loan	-	94,353
Gain on settlement of debt	-	120,000
Gain (loss) on valuation of marketable securities	(1,500)	881
Interest income	88,044	2891
Forgiveness of accounts payable	3,473,705	_
_	3,246,358	259,573
NET LOSS FOR THE YEAR	(1,147,677)	(3,078,378)
Loss attributable to the shareholders of the Company	(1,127,892)	(2,945,580)
Loss attributable to non-controlling interest	(19,785)	(132,797)
<u>-</u>	(1,147,677)	(3,078,378)
OTHER COMPREHENSIVE INCOME (items that may be reclassified to profit or loss)		
Foreign currency translation	349,220	(135,388)
Attributable to the shareholders of the Company	328,721	(127,698)
Attributable to non-controlling interest	20,499	(7,690)
	349,221	(135,388)
COMPREHENSIVE LOSS	(798,456)	(3,213,766)
Attributable to the shareholders of the Company	(799,170)	(3,073,279)
Attributable to une snareholders of the Company  Attributable to non-controlling interest	714	(140,487)
- Transaction to non-controlling interest	(798,455)	(3,213,766)
<del>-</del>	(770,433)	(3,213,700)
BASIC AND DILUTED LOSS PER SHARE (attributable to the owners of the parent)	\$ (0.01)	\$ (0.03)
WEIGHTED AVERAGE SHARES OUTSTANDING - BASIC AND DILUTED	103,038,873	98,146,465
<u> </u>		

## **Expenses**

Expenses for the year ended December 31, 2021 and 2020 were \$4,394,035 and \$3,337,951, respectively. The increase of 31.6% was primarily due to:

- Accretion: Increased by \$4,084 from \$883 during the year ended December 31, 2020 to \$4,967 during the year ended December 31, 2021. This increase is due to CEBA loan that the Company received in October 2020.
- Amortization and depreciation expense: Increased by \$21,979 from \$54,899 during the year ended December 31, 2020 to \$76,878 during the year ended December 31, 2021.
- Consulting: Decreased by \$107,021 from \$384,700 during the year ended December 31, 2020 to \$277,679 during the year ended December 31, 2021. The decrease is mainly due to reclassification of director fees that were previously recorded in consulting fee.
- Director and management fees: Increased by \$167,673 from \$72,853 during the year ended December 31, 2020 to \$240,526 during the year ended December 31, 2021. The increase is mainly due to reclassification of director fees that were previously recorded in consulting fee.
- Filing fees: Increased by \$30,919 from \$31,127 during the year ended December 31, 2020 to \$62,046 during the year ended December 31, 2021.
- General and administrative: Decreased by \$35,738 from \$82,299 during the year ended December 31, 2020 to \$46,561 during the year ended December 31, 2021.
- Insurance expense increased by \$28,455 from \$Nil during the year ended December 31, 2020 to \$28,455 during the year ended December 31, 2021.
- Interest expense: Increased by \$254,681 from \$239,240 during the year ended December 31, 2020 to \$493,921 during the year ended December 31, 2021. The increase is due to higher short-term borrowings during the year ended December 31, 2021.
- Motor vehicle expenses: Decreased by \$14,389 from \$17,559 during the year ended December 31, 2020 to \$3,170 during the year ended December 31, 2021. The decrease is due to a decrease in corporate activities during the year ended December 31, 2021.
- Payroll: Decreased by \$188,435 from \$480,018 during the year ended December 31, 2020 to \$291,583 during the year ended December 31, 2021. The decrease is due to the resignation of a director and employees.
- Professional fees: Decreased by \$31,175 from \$123,216 during the year ended December 31, 2020 to \$92,041 during the year ended December 31, 2021. The decrease reflects a decrease in corporate activities.
- Research and development: Decreased by \$78,969 from \$1,555,334 during the year ended December 31, 2020 to \$1,476,365 during the year ended December 31, 2021. The decrease reflects a decrease in spending on development of the Company's pharmaceutical products.
- Travel and entertainment: Decreased by \$47,817 from \$108,245 during the year ended December 31, 2020 to \$60,428 during the year ended December 31, 2021. The decrease is due to COVID-19 related travel restrictions.
- Share-based compensation: Increased by \$1,055,698 from \$109,253 during the year ended December 31, 2020 to \$1,164,951 during the year ended December 31, 2021. The increase is due to a new stock option grant during the year ended December 31, 2021.

### Other income

Other income for the years ended December 31, 2021 and 2020 were \$3,246,358 and \$259,573 respectively. The increase was primarily due to:

- Interest income: Increased by \$85,153 from \$2,891 during the year ended December 31, 2020 to \$88,044 during the year ended December 31, 2021 due to interest charged on land principals held by from Korea Land & Housing Corp.
- Forgiveness of loan: Increased by \$3,473,705 from \$Nil during the year ended December 31, 2020 to \$3,473,705 during the year ended December 31, 2021 due to the accounts payable to Pharos being forgiven.
- Impairment of rent deposit: Increased by \$308,409 from \$Nil during the the year ended December 31, 2020 to \$308,409 during the year ended December 31, 2021 as the agreement with KLHC was terminated and the initial payment of KRW 281,395,000 was forfeited.
- Loss on valuation of marketable securities: Increased by \$2,381 from income of \$881 during the year ended December 31, 2020 to \$1,500 during the year ended December 31, 2021.

### Other comprehensive income (loss)

Other comprehensive income for the year ended December 31, 2021 was \$349,221, compared to other comprehensive loss of \$135,388 during the year ended December 31, 2020. The change was due foreign currency translation.

### **QUARTERLY FINANCIAL INFORMATION**

The following table summarizes selected unaudited financial date for each of the last eight fiscal quarters, prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and Interpretations of Financial Reporting Interpretations Committee ("IFRIC"):

	Quarter Ended			
	December 31, 2021	September 30, 2021	June 30, 2021	March 31, 2021
	("Q4 2021") \$	("Q3 2021") \$	("Q2 2021") \$	("Q1 2021") \$
Revenue	-	-	-	-
Operating expenses	195,742	1,544,881	1,644,120	1,400,775
Other income (loss)	3,246,356	-	2	-
Net loss for the quarter	(3,442,098)	(1,544,881)	(1,644,118)	(1,400,775)
Basic and diluted loss per common	,	, , , , ,	, , , , , ,	
share	(0.03)	(0.01)	(0.01)	(0.01)
Total assets	4,153,015	4,428,679	4,750,843	5,632,937
Total liabilities	(5,005,331)	7,953,332	8,447,231	8,143,954

	Quarter Ended			
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020
	("Q4 2020")	("Q3 2020")	("Q2 2020")	("Q1 2020")
	\$	\$	\$	\$
Revenue	-	-	-	-
Operating expenses	1,782,081	437,645	485,583	639,328
Other income (loss)	258,965	84	(5,930)	(233)
Net loss for the quarter	(1,523,116)	(437,561)	(491,513)	(639,561)
Basic and diluted loss per common				
share	(0.02)	(0.01)	(0.01)	(0.01)
Total assets	4,550,420	4,965,855	5,023,116	4,782,876
Total liabilities	6,864,787	5,843,129	5,439,520	5,065,496

During the fourth quarter of 2021, the Company had lower operating expenses and net losses than prior period. This decrease in operating expenses is due to a decrease in corporate activities.

During the third quarter of 2021, the Company had a significantly higher loss than in the comparative period. This increase in loss was mainly due to additional share-based compensation of \$909,572 related to a stock option grant during the quarter.

During the fourth quarter of 2020, the Company's trend of lower operating expenses than during the comparable period continued. The fourth quarter expenses and net losses have been higher than prior period expenses and net losses for the current year. This increase in operating expenses is due to an increase in activity in the development of the Company's pharmaceutical products.

During the third quarter of 2020, the Company reported the lowest quarterly loss of any period. This reduction in loss was mainly due to decreased share-based compensation expense, research and development and general and administrative expenses representing lower levels of research and office activities in the Company.

### LIQUIDITY AND CAPITAL RESOURCES

The continuing operations of the Company are dependent upon its ability to raise additional capital during the next twelve months and beyond to support current operations and planned development. As at December 31, 2021, the Company has not earned significant revenue and has an accumulated deficit of \$26,082,370 (December 31, 2020 - \$25,071,293). In order to reach sustainable business operations, they will continue to seek additional sources of financing.

The Company's cash balance as of December 31, 2021 was \$159,097 compared to \$46,679 as of December 31, 2020. As of December 31, 2021, the Company had current assets of \$2,133,688 (December 31, 2020 - \$135,774), current liabilities of \$3,751,568 (December 31, 2020 - \$3,941,143), and a working capital deficiency of \$1,617,880 (December 31, 2020 - \$3,805,369).

#### **Operating Activities**

During the years ended December 31, 2021 and 2020, the Company's operating activities used cash of \$1,083,329 and \$1,310,202, respectively. Cash used in operating activities for the year ended December 31, 2021 and 2020 were mainly attributable to net loss for the year of \$1,147,677 and \$3,078,378, respectively, which were partially offset by a significant increase in accounts payable and accrued liabilities of \$1,714,982 and \$1,791,301, respectively. For the years ended December 31, 2021 and 2020, non-cash items, especially share-based compensation of \$1,164,951 and \$109,253 also contributed significantly to the reduction in cash outflows.

During the year ended December 31, 2021, the Company received notification of termination of research agreement with Pharos Vaccine Inc. ("Pharos") due to lack of payment by the Company. Pharos terminated the contract with \$Nil owing by the Company. The Company recognized a gain of \$3,473,705 (2020 - \$Nil) relating to accounts payable of KRW 2,827,667,497 and the accrued interest of KRW 341,770,930.

### **Investing Activities**

During the year ended December 31, 2021 the Company's investing activities used cash of \$3,936 compared to generated cash of \$91,492 for the year ended December 31, 2020. These variations are due to the purchase of computer equipment in the current year and the recovery of a loan receivable in the previous year.

## **Financing Activities**

During the years ended December 31, 2021 and 2020, the Company's financing activities generated cash of \$1,168,686 and \$1,133,959, respectively. The cash generated from financing activities during the year ended December 31, 2021 is due to a private placement for net proceeds of \$988,560, the Company's wholly owned subsidiary, BP Korea issuing 7,692 shares for proceeds of \$109,596 as well as proceeds from borrowings of \$172,553 while the cash generated from financing activities during the year ended December 31, 2020 is due to a private placement for net proceeds of \$246,782, the Company's wholly owned subsidiary, BP Korea issuing 59,557 shares for proceeds of \$738,600 as well as proceeds from borrowings of \$341,578, government assistance in form of the CEBA loan of \$60,000. The proceeds from financing activities were partially offset by partial repayments of loans and lease payments in the amount of \$86,635 and \$15,388 respectively during the year ended December 31, 2021 and \$241,031 and \$11,970 respectively during the year ended December 31, 2020.

## OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements, financings, or other relationships with unconsolidated entities or other persons, also known as "special purpose entities".

## **RELATED PARTY TRANSACTIONS**

#### **Key management compensation**

Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Company as a whole. The Company has determined that key management personnel consist of members of the Company's Board of Directors and the Chief Executive Officer ("CEO"). The remuneration of directors and key management personnel for the three and nine months ended September were as follows:

	2021	2020
	\$	\$
Management and directors' fees	235,513	314,987
Share-based compensation	520,073	64,431
Total	755,586	379,418

## Loan payable to related parties

As of December 31, 2021, the Company has a loan of \$47,000 (December 31, 2020 - \$47,000) payable to a significant shareholder which is non-interest bearing, unsecured, and due on demand. As of December 31, 2021, the Company has a loan of \$463,622 (KRW 434,543,080) (December 31, 2020 - \$348,957 (KRW 298,252,645)) payable to the CEO of the Company which bears interest at 4.6% per annum, is unsecured, and due on demand.

#### **Share transactions**

Directors and key management personnel also participated in the Company's private placement during the year ended December 31, 2021. They invested a total of \$75,200 and received a combined 470,000 Units at \$0.16 per Unit. Each Unit is comprised of one common share and one share purchase warrant of the Company. Each share purchase warrant entitles the holder to purchase additional common share of the Company at \$0.21 per common share until July 14, 2023.

During the year ended December 31, 2020, the Company issued 136,364 shares to settle debt in the amount of \$30,000 with two directors of the Company.

Directors and key management personnel also participated in the Company's private placement during the year ended December 31, 2020. They invested a total of \$20,000 and received a combined 142,860 Units at \$0.14 per Unit. Each Unit is comprised of one common share and one share purchase warrant of the Company. Each share purchase warrant entitles the holder to purchase additional common share of the Company at \$0.21 per common share until October 14, 2022.

## PROPOSED TRANSACTIONS

The Company continues to engage in discussions with several financing groups and intends to provide a market update when the Company's management and board make a decision to proceed with any such financing.

## SIGNIFICANT ACCOUNTING ESTIMATES

#### **Significant Estimates and Assumptions**

The preparation of financial statements in accordance with IFRS requires the Company to make estimates and assumptions concerning the future. The Company's management reviews these estimates and underlying assumptions on an ongoing basis, based on experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions to estimates are adjusted for prospectively in the period in which the estimates are revised.

Estimates and assumptions where there is significant risk of material adjustments to assets and liabilities in future accounting periods include the recoverability of investments in KWULP and KWUC, useful lives of equipment, recoverability of receivables, fair value measurement and the timing of future cash flows of financial instruments, and the measurement of deferred tax assets and liabilities.

## **Significant Judgements**

The preparation of consolidated financial statements in accordance with IFRS requires the Company to make judgments, apart from those involving estimates, in applying accounting policies. The most significant judgments in applying the Company's accounting policies in these consolidated financial statements were:

• Evaluating whether or not costs incurred by the Company in developing its pharmaceutical products meet the criteria for capitalization to intangible assets. Management determined that as at December 31, 2020, it was not yet able to demonstrate with sufficient certainty that future economic benefits will flow to the Company. Accordingly, all research and development costs incurred to date have been expensed.

Other significant judgments in applying the Company's accounting policies relate to the assessment of the Company's ability to continue as a going concern, the classification of its financial instruments and the classification of leases as either operating or finance type leases.

## **FINANCIAL INSTRUMENTS AND RISKS**

Classification of financial instruments

Financial assets included in the statement of financial position are as follows:

	December 31, 2021	December 31, 2020
	\$	\$
Fair value through profit or loss		
Cash	159,097	46,679
Investments in KWULP and KWUC	1,965,527	1,965,527
Other investment	1,099	2,807
Amortized cost		
Land deposit receivable	1,890,879	-
	4,016,602	2,015,013

Financial liabilities included in the statement of financial position are as follows:

	December 31, 2021	December 31, 2020
	\$	\$
Fair value through profit or loss:		
Convertible debenture	1,219,574	1,332,729
Financial liabilities at amortized cost:		
Accounts payable and accrued liabilities	938,765	2,576,171
Loans payable	2,566,498	2,639,999
Lease liability	3,638	18,382
	4,728,475	6,567,281

#### Fair value

The Company has applied a three-level hierarchy to reflect the significance of the inputs used in making fair value measurements. The three levels of fair value hierarchy are:

Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities;

- Level 2 Inputs other than quoted prices that are observable for assets or liabilities, neither directly or indirectly; and
- Level 3 Inputs for assets or liabilities that are not based on observable market data.

The Company's financial instruments consist of cash, receivables, loan receivable, accounts payable and accrued liabilities, loans payable, severance liability and convertible debentures. The fair value of these financial instruments, other than cash and convertible debentures, approximates their carrying values due to the short-term nature of these instruments. Cash is measured at fair value using level 1 inputs.

Financial liabilities measured at fair value consisted of preferred share liabilities, which is measured using level 2 inputs.

The Company is exposed to a variety of financial risks by virtue of its activities including currency, credit, interest rate and liquidity risk.

## a) Credit risk

Credit risk is risk of financial loss to the Company if the counterparty to a financial instrument fails to meet its contractual obligations. The Company's cash is held in large Korean financial institutions and is not exposed to significant credit risk.

## b) Interest rate risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is exposed to limited interest rate risk.

#### c) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its obligations as they come due. The Company's ability to continue as a going concern is dependent on management's ability to raise the required capital through future equity or debt issuances. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the directors are actively involved in the review, planning, and approval of significant expenditures and commitments.

#### d) Foreign currency risk

The Company's functional currency is the South Korean Won and major transactions are in South Korean Wons. As of December 31, 2021, the Company had \$168,188 (December 31, 2020 - \$50,452) in financial assets and \$622,304 (December 31, 2020 - \$396,839) in financial liabilities, denominated in Canadian Dollars. The remaining values in financial assets and financial liabilities are denominated in South Korean Wons. Management believes that the foreign exchange risk related to currency conversion is minimal and therefore does not hedge its foreign exchange risk.

## e) Capital Management

The Company defines capital that it manages as its shareholders' equity. When managing capital, the Company's objective is to ensure the entity continues as a going concern as well as to maintain optimal returns to shareholders and benefits for other stakeholders. The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management to sustain future development of the business.

Management reviews its capital management approach on an ongoing basis and believes that this approach, given the relative size of the Company, is reasonable. There were no changes to the Company's approach to capital management during the period.

### RISKS AND UNCERTAINTIES

Possible Failure to Realize Anticipated Benefits of the Arrangement

Biocure has completed a "going public" transaction by way of a reverse take-over to better position itself in the industrial stage of the biopharmaceutical industry and to create opportunities to realize certain benefits such as commercialization of the biopharmaceutical industry, increased liquidity, greater access to capital markets, and increased ability to pursue acquisition opportunities. Biocure has a long-term objective to expand its business to overseas markets such as South America, Middle East, North Africa, and Asia. The reverse takeover transaction could provide Biocure with a platform to achieve such a goal. There can be no assurance that after the RTO transaction, Biocure will be able to realize the anticipated growth opportunities and synergies required to achieve the anticipated benefits.

#### Biopharmaceutics Public Market Risks

Prospects for companies in the biopharmaceutical industry generally may be regarded as uncertain given the nature of the industry and, investments in biopharmaceutical companies should be regarded as speculative. Biopharmaceutical research and development involves a significant degree of risk. However, main products of Biocure are biosimilar, which are known and proven products by multinational pharmaceutical companies. Biocure has been developing a few biosimilar products from the patents of which were expired or about to expire in the near future. Therefore, the risks involved in such biosimilar products are relatively lower than that of so called, new biopharmaceuticals.

Nevertheless, an investor should carefully consider the risks and uncertainties described below. The risks and uncertainties described below are not an exhaustive list. Additional risks and uncertainties not presently known to Biocure or that Biocure believes to be immaterial may also adversely affect Biocure's business. If any one or more of the following risks occur, Biocure's business, financial condition, and results of operations could be seriously harmed. Further, if Biocure fails to meet the expectations of the public market in any given period, the market price of Biocure shares could decline.

#### Commercialization Uncertainties

To launch biosimilar products of Biocure to the market, additional investment in development, product validation, manufacturing, production scale-up, pre-clinical & clinical testing, and regulatory submissions of such products is required prior to commercialization. There can be no assurance that any such products will be commercialized in the time as planned.

#### Additional Financing Requirements and Access to Capital

Biocure will require substantial additional funds for further research and development, planned clinical testing, regulatory approvals, establishment of manufacturing capabilities and, if necessary, and the marketing and sale of its products. Biocure may attempt to raise additional funds for these purposes through public or private equity, debt financing, collaborations with other biopharmaceutical companies, and/or from other sources. There can be no assurance that additional funding or partnership will be available on terms acceptable to Biocure and which would foster successful commercialization of Biocure products.

## Government Regulations

Biopharmaceutical companies operate in a high-risk regulatory environment. Biopharmaceutical products are governed by numerous statutes and regulations in Korea and other countries where Biocure intends to market its products. The subject matter of such legislation includes approval of manufacturing facilities, controlled research and testing procedures, review and approval of manufacturing, preclinical and clinical data prior to marketing approval, as well as regulation of marketing activities. The process of completing clinical testing and obtaining required approvals for biosimilar products is likely to take about a year and require the expenditure of moderate resources. There can be no assurance that the regulators will not require modification to any submissions that may result in delays to obtain regulatory approvals. Any delay to obtain regulatory approvals could adversely affect the ability of Biocure

to utilize its technology, thereby adversely affecting operations. There is no assurance that Biocure will be able to timely and profitably produce its products while complying with all the applicable regulatory requirements.

#### Patents and Proprietary Technology

The biosimilar products that Biocure is currently pursuing do not have patent and proprietary issues in general due to the fact that Biosimilar implies they are free from existing patents already. At the same time, Biosimilar technology is not protected by patents or proprietary rights.

Original patent holders could extend the period of the patent in specific countries that Biocure is planning to enter into. There is no assurance that Biocure products do not face any conflicts in patent and proprietary rights.

## Dependence on Collaborative Partners and Others

Biocure activities will require it to enter into various arrangements with corporations, academic collaborators and others for research, development, clinical testing, manufacturing, marketing, and commercialization of its products. Biocure intends to attract corporate partners and enter into additional research collaborations. There can be no assurance, however, that Biocure will be able to establish such additional collaborations on favorable terms, if at all, or that its current or future collaborations will be successful. Failure to attract commercial partners for its products may result in Biocure incurring substantial clinical testing, manufacturing, and commercialization costs prior to realizing any revenue from product sales or result in delays or program discontinuance if funds are not available in sufficient quantities.

If any collaborative partner in oversea countries where Biocure plans to implement pre-clinical and clinical testing program for biosimilar fails to meet its timeline, or local regulations and procedures, Biocure's business may be adversely affected. Failure of a collaborative partner to participate in preclinical and clinical testing program could delay the commercialization of products related to such programs.

In addition, there can be no assurance that the collaborative partners will not pursue other alternative products either alone or in collaboration with others, including Biocure's competitors.

## Rapid Technological Change

The biopharmaceutical industries are characterized by rapid and substantial technological change. There can be no assurance that developments by others will not render Biocure's proposed products or technologies non-competitive, or that Biocure will keep pace with technological developments. Competitors have developed or are developing technologies that could be the basis for competitive products. Some of these products have an entirely different approach, compared with products to be developed by Biocure and could be more effective and less costly than the products to be developed by Biocure. In addition, alternative forms of medical treatment may compete with Biocure's products.

## Competition

Technological competition from biopharmaceutical companies is intense and is expected to increase. Potential competitors of Biocure may have more product development, financial, scientific, marketing, and human resources capabilities exceeding those of Biocure. Competitors may develop products before Biocure obtain regulatory approval for such products more rapidly than Biocure, or develop products which are more effective than those that Biocure intends to develop. Research and development by others may render Biocure's proposed technology or products obsolete or non-competitive.

### Potential Product Liability

Pharmaceutical products involve an inherent risk of product liability claims and associated adverse publicity. Product liability insurance is costly, availability is limited, and may not be available on terms that would be acceptable to Biocure, if at all. A product liability claim brought against Biocure could have a material adverse effect upon Biocure and its financial condition.

#### Reliance on Key Personnel

Biocure is dependent on certain members of its management and scientific staff, as well as consultants and contractors, the loss of services of one or more of whom could adversely affect Biocure. In addition, Biocure's ability to manage growth effectively will require it to continue to implement and improve its management systems and to recruit and train new employees. There can be no assurance that Biocure will be able to successfully attract and retain skilled and experienced personnel.

Minimal Product Revenues and History of Losses

To date, Biocure has recorded minimal revenues from the sale of biopharmaceutical products. Biocure expects to incur additional losses during the periods of research and development, clinical testing, and application for regulatory approval of its products. Biocure expects to incur losses until payments from corporate collaborations, product sales and/or royalty payments generate sufficient revenues to fund its continuing operations.

Volatility of Share Price, Absence of Dividends and Fluctuation of Operating Results

Market prices for the securities of biopharmaceutical companies, including Biocure, have historically been highly volatile. Factors such as fluctuation of Biocure's operating results, announcements of technological innovations, patents or new commercial products by Biocure or competitors, results of clinical testing, regulatory actions, or public concern over the safety of biopharmaceutical products, and other factors could have a significant effect on the share price or trading volumes for the common shares. Biocure shares, if traded publically, may be subject to significant price and volume fluctuations and may continue to be subject to significant price and volume fluctuations in the future. Biocure has not paid dividends to date and does not expect to pay dividends in the foreseeable future.

### Conflict of Interest

Certain directors and senior officers of Biocure may, from time to time, be employed by or affiliated with organizations that have entered into agreements with Biocure. As disputes may arise between these organizations and Biocure, or certain organizations may undertake or have undertaken research with competitors of Biocure, there exists the possibility for such persons to be in a position of conflict. Any decision or recommendation made by these persons involving Biocure will be made in accordance with his or her duties and obligations to deal fairly and in good faith with Biocure and such other organizations. In addition, as applicable, such directors and officers will refrain from voting on any matter in which they have a conflict of interest.

No Key Man Insurance

The Company does not currently have key man insurance in place in respect of any of its senior officers or personnel.

#### COVID-19

Since March 2020, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to businesses globally resulting in an economic slowdown. Global equity markets have experienced significant volatility and weakness. Governments and central banks have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 outbreak is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on they Company's financial results.

## **OUTSTANDING SHARE DATA**

The Company has authorized an unlimited number of common shares without par value.

As of December 31, 2021, there were 106,621,158 common shares issued and outstanding. As of the date of this MD&A, there were 106,621,158 common shares issued and outstanding.

As of December 31, 2021, there were 9,027,272 warrants issued and outstanding. As of the date of this MD&A, there were 9,027,272 warrants issued and outstanding.

As of December 31, 2021, there were 7,570,000 stock option outstanding and exercisable. As of the date of this MD&A, there are 7,570,000 stock options outstanding and exercisable.

### **CLAIMS AND LAWSUITS**

On March 6, 2019 BiocurePharma Inc (BPK) received a notice that a lawsuit was filed with the court of Suwon District. Sehyun Pharma Co. ("SP") filed a compensation claim. On Jan. 23, 2017 SP and BPK signed an agreement for a take-over SP however later in the process terminated for business reasons. The plaintiffs are seeking damages of KRW 500,000,000 (\$585,000) for the termination of the contract. The Company is of the view that the allegations contained in the claim are without merit and intends to vigorously defend its position.

During the year ended December 31, 2021, the lawsuit filed with the court of Suwon District. Sehyun Pharma Co. ("SP") against the company was dismissed.

### SUBSEQUENT EVENTS

On March 25, 2022, the land purchase agreement with Korea Land & Housing Corp. (KLHC) was terminated. The instalment funds paid by BPK were refunded to BPK after deduction of interests, where the down payment was forfeited.

Also on March 25, 2022, there was operational update that BPK is under way to develop Ror1 Car-T for a chronic leukemia treatment and innovative Car-T, which can treat lung and ovarian cancer. All new Car-T products under development are a bispecific (dual antibody binding) Car-T and made in a combination that can resolve the recurrent issues and side effects of the existing Car-T.

In addition, BPK is one step away from the completion of development for another innovative Car-T model that destroys the PD-1/PDL-1 system, which is the most important self-defence mechanism of cancer cells. This technology could disarm the tumour microenvironment (TME) that cancer cells run for self-defence and equip Car-T with a new mechanism that supports Car-T to work more effectively on cancer cells to treat lung and ovarian cancer.

BPK is in close discussion for a partnership with a Korean company which is interested to set up a contract development and manufacturing company (CDMO) business. It will make the company more focused on the research and development of technologies, where manufacturing could be done at the GMP facility of such a CDMO partnership.

### ADDITIONAL INFORMATION

The Company files annual and other reports and other information with Canadian securities regulatory authorities. The documents are available to the public at <a href="http://www.sedar.com">http://www.sedar.com</a>.

## **APPROVAL**

The Board of Directors of the Company has approved the disclosure contained in this MD&A.