

REPLICEL LIFE SCIENCES INC.

**MANAGEMENT DISCUSSION AND ANALYSIS (“MD&A”)
FORM 51-102F1**

For the three months ended March 31, 2014

Dated as of May 29, 2014

The following management discussion and analysis of the financial position, results of operations and cash flows of RepliCel Life Sciences Inc. (“the Company”, “RepliCel” or “we”), for the three months ended March 31, 2014 includes information up to and including May 29, 2014 and should be read in conjunction with the annual audited consolidated financial statements for the years ended December 31, 2013, 2012, and 2011.

The financial statements of the Company for the three months ended March 31, 2014 have been prepared in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”).

All amounts included in the financial statements and MD&A are expressed in Canadian dollars unless otherwise indicated. The reader is encouraged to review the Company’s statutory filings on the SEDAR website at www.sedar.com.

Cautionary Statement Regarding Forward-Looking Statements

Statements included in this MD&A that do not relate to present or historical conditions are “forward-looking statements”. Forward-looking statements are projections in respect of future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as “may”, “should”, “intend”, “expect”, “plan”, “anticipate”, “believe”, “estimate”, “predict”, “potential”, or “continue”, or the negative of these terms or other comparable terminology. Forward-looking information presented in such statements or disclosures may, among other things, include: the potential of our products, including its potential for success with women; forecasts of expenditures; the sources of financing; expectations regarding our ability to raise capital; our business outlook; plans and objectives of management for future operations; and anticipated financial performance.

Various assumptions or factors are typically applied in drawing conclusions or making the forecasts or projections set out in forward-looking information. Those assumptions and factors are based on information currently available to our Company, including information obtained from third-party industry analysts and other third party sources. In some instances, material assumptions and factors are presented or discussed elsewhere in this Annual Report in connection with the statements or disclosure containing the forward-looking information. You are cautioned that the following list of material factors and assumptions is not exhaustive. The factors and assumptions include, but are not limited to:

- no unforeseen changes in the legislative and operating framework for the business of our Company;
- a stable competitive environment; and
- no significant event occurring outside the ordinary course of business such as a natural disaster or other calamity.

These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks in the section entitled “Risk Factors” commencing on page 16, which may cause our or our industry’s actual results, levels of activity or performance to be materially different from any future results, levels of activity or performance expressed or implied by these forward-looking statements. These risks and uncertainties include:

- negative results from our clinical trials;
- failure to achieve regulatory marketing approval for our technologies;
- the effects of government regulation on our business;
- the viability and marketability of our technologies;
- the development of superior technology by our competitors;
- the failure of consumers and the medical community to accept our technology as safe and effective;
- risks associated with our ability to obtain and protect rights to our intellectual property;
- risks and uncertainties associated with our ability to raise additional capital; and
- other factors beyond our control.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity or performance. Further, any forward-looking statement speaks only as of the date on which such statement is made, and, except as required by applicable law, we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for management to predict all of such factors and to assess in advance the impact of such factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statement.

OVERALL PERFORMANCE

The Company was incorporated under the Ontario Business Corporations Act on April 24, 1967. We are a reporting issuer under the securities laws of the Provinces of British Columbia and Ontario. We are a foreign private issuer in the United States. Our common shares are listed for trading in Canada on the TSX Venture (TSXV), trading under the symbol RP and in the United States on the OTCQB, trading under the symbol REPCF.

RepliCel Life Sciences Inc. is a regenerative medicine company focused on developing autologous cell therapies that treat functional cellular deficits. The diseases currently being addressed are chronic tendinosis, skin aging, and androgenetic alopecia (pattern baldness). Each disease state is consistent with a deficit of a specific cell type which we believe is critical to normal function. All treatments under development are based on RepliCel's innovative technology which utilizes cells isolated from a patient's own healthy hair follicles. These products are built on the company's proprietary manufacturing platforms and are covered by issued and filed patents, as well as trade secrets. RepliCel is also developing a programmable cell injector device designed for dermal injections.

RCT-01: Non-bulbar Dermal Sheath (NBDS) Fibroblast Therapy to Treat Chronic Tendinosis

Chronic tendon injuries resulting from sports-related or occupational overuse is a significant unmet medical need. Tendons consist of specialized connective tissues that attach muscles to bones, transmitting force and supporting the musculoskeletal system. When mechanical loads exceed the strength of a tendon or tensile range is lost due to aging, micro-tears of the collagen fibers within tendon occur. Once a tendon is injured, healing can occur intrinsically via tenocyte activation within the injured site or extrinsically via recruitment of collagen-producing cells from the surrounding area. Naturally healed tendon does not return to the same physiological state as 'intact' tendon, but does allow for normal function. Inadequate rest and improper healing often result in re-injury and rupture. Current treatments manage pain and facilitate healing processes; however, they do not mediate complete recovery and leave patients demobilized for several months during treatment. Improved therapeutic strategies are therefore in considerable demand. RepliCel's fibroblast technology for tendinosis (RCT-01) has been developed over five years of research, experimentation and trials. RCT-01 is a tissue-engineered product made from a procedure using collagen-producing fibroblasts isolated from non-bulbar dermal sheath (NBDS) cells within the hair follicle that are replicated in culture. These fibroblasts are efficient producers of type I collagen and because they are of anagen-hair follicle mesenchymal origin, they have the potential to replicate efficiently in culture. The use of these fibroblasts are, therefore,

ideal for treating chronic tendon disorders that arise due to either a degeneration of tenocyte collagen producing cells or a deficit of active collagen producing tenocyte cells. Because RCT-01 directly provides a source of collagen expressing cells to the site of injury, addressing the underlying cause of tendinosis, it has advantages over current treatments such as the use of non-steroidal anti-inflammatory medication or corticosteroids which are limited in efficacy. Another advantage of RCT-01 is the autologous nature of the cellular product, thereby reducing the likelihood of adverse immune reactions upon administration.

Phase 1 human pilot clinical trials were conducted by RepliCel's collaborative partner, Dr. David Connell which focused on tendinosis of the Achilles, patellar and lateral elbow (tennis elbow) using skin tissue derived fibroblasts. In these trials, where 90 patients were injected with cultured, autologous fibroblasts, no adverse events were reported. RepliCel has expanded on Dr. Connell's approach by isolating NBDS fibroblasts from the hair follicle that express upwards of five times the amount of type I collagen than fibroblasts derived from skin tissue as pursued by Dr. Connell.

RepliCel plans to initiate a phase 2 clinical trial to test the safety and efficacy of injections of RCT-01 on patients suffering from chronic Achilles tendinosis in Canada in 2014. The proposed trial will enroll 82 subjects who have failed traditional tendon treatments and who are otherwise in good health. The mechanics of our treatment involve the extraction of as few as 20 hair follicles from the back of a patient's scalp via a single punch biopsy. NBDS cells are isolated from the hair follicle sheath, replicated in a cGMP facility, and are then reintroduced under ultrasound guidance directly into the area of damaged tendon. The collagen rich fibroblast cells are expected to initiate and complete the healing of the chronically injured tendon. After injections are performed, subjects will return to the clinic for assessments of safety, function and pain, as well as changes in tendon thickness, echotexture, interstitial tears and neovascularity. The primary endpoint of efficacy will be measured at 6 months. We will pursue further indications of other tendon populations including Patellar tendinosis (jumper's knee) and lateral and medial epicondylitis (tennis and golfer's elbow).

RepliCel has developed and filed patent applications relating to compositions, methods and uses of NBDS cells for the treatment and repair of tendons. RepliCel has also licensed a family of patent applications relating to the compositions and uses of dermally derived cells in the treatment of tendons and ligaments.

RCS-01: Non-bulbar Dermal Sheath (NBDS) Fibroblast Therapy to Treat Aging and Sun Damaged Skin

Skin is considered one of the most prominent indicators of one's age and health. Maintenance of healthy skin is dictated by intrinsic and extrinsic factors. While intrinsic factors (i.e. chronologic age, sex and genetic makeup) cannot be modified, the adverse effects caused by extrinsic factors such as UV radiation and smoking can be prevented or minimized by lifestyle modification. Although these extrinsic effects can be modulated, the extent to which they can be modified varies significantly among individuals, which largely depends on one's ability to detoxify and repair such damage.

The dermis and epidermis components of the skin lose thickness with age. Solar radiation, particularly UVA, is known to penetrate deep into the dermal layer, damaging fibroblasts, collagen and other fibroblasts expressed proteins, which are the major cellular components of the dermis. Similarly, there are some studies reporting that air pollutants/nanoparticles may also penetrate transepidermally, negatively impacting the dermal layer. The damages caused by external stimuli include DNA strand breaks and mutations, which, if not repaired properly, can lead to cell death. Similarly, oxidative stress caused by smoking leads to not only damages to DNA but also to other cellular components such as proteins and lipids.

Accumulation of damage to cellular proteins and DNA from years of exposure to extrinsic insults can lead to physiological changes of the skin that are irreversible. Such changes are often associated with a reduction in fibroblast cells, disorganization of collagen fibrils and decreased production of collagen, elastin and other glycoproteins that provide structural support and stability to the extra cellular matrix ("ECM") network. Such changes to the dermal components are detrimental to maintaining mechanical tensile ability and structural

integrity of the skin.

RepliCel's NBDS-derived fibroblast therapy, RCS-01, provides a promising platform to treat intrinsically and extrinsically aged/damaged skin by providing UV-naïve collagen-producing fibroblast cells directly to the affected area. RepliCel's unique manufacturing technology allows for isolation of fibroblasts derived from anagen-hair follicle mesenchymal tissues, which elicit more efficient replication potential in culture. Additionally, RepliCel's proprietary culture procedures potentiate these cells to maintain plasticity, allowing the cells to adapt to the microenvironment and respond to the mechanical or surrounding stimuli after injection, leading to robust production of type I collagen and elastin and their proper alignment within the tissue. RepliCel is currently conducting preclinical work on RCS-01 in conjunction with RCT-01.

RCH-01: Dermal Sheath Cup (DSC) Cell Therapy to Treat Hair Loss

Androgenetic alopecia (pattern hair loss) can affect up to 70% of men and 40% of women during the course of their lives. Although it's not a disease that causes physical pain, it does cause mental pain. Currently, over \$3 billion is spent each year on hair loss treatments that provide limited results. We believe our dermal sheath cup (DSC) cell therapy offers several advantages over current hair loss solutions. The current gold standard in hair loss treatment is hair transplant surgery which requires the surgical removal of a prominent band of hair-bearing scalp or multiple micro-biopsies from the back of the head. This band of resected tissue or biopsies are then dissected into hair follicles consisting of one to three hairs which are then implanted into balding areas on the scalp. Often a number of similar procedures are required to achieve the desired result and the patient is limited by the number of hairs that can be redistributed. In contrast, RCH-01 involves the extraction of as few as 20 hair follicles from the back of the patient's scalp where healthy cycling hair follicles reside. We believe these cells are responsible for the continued health of the hair follicle and the normal cycling of the hair fiber. DSC cells are isolated from the hair follicles and are then replicated in culture at a cGMP compliant facility utilizing our proprietary cellular replication process, and are then reintroduced back into balding areas on a patient's scalp. The implanted cells are expected to rejuvenate damaged quiescent hair follicles leading to the growth of new healthy hair fibers. The anticipated long-term result of RCH-01 injections is the restoration and maintenance of a patient's hair.

RepliCel's phase 1 first in man clinical study provided the required safety data, as well as early proof of response to treatment. We expect to initiate a phase 2 dose-finding trial for RCH-01 in 2014. The proposed trial will enroll approximately 160 male subjects in good health with mild to moderate androgenetic alopecia. After injections of RCH-01 are performed, subjects will return to the clinic for assessment of total, terminal and vellus hair density and cumulative hair thickness, as well as safety. The primary endpoint of efficacy will be measured at 12 months post final injection.

Patents have been filed on the use of hair follicle derived stem cells (EP 1 509 597 B1) entitled "Method for isolating hair follicle mesenchymal stem cells". This family of patents describes methods for isolating stem cells from hair follicles, and the growth and use of these stem cells for the treatment of a variety of medical conditions (including hair loss). Within this portfolio, there are granted patents in Australia (AU 2003246521), Europe (EP1 509 597 B1), the United States (8,431,400) and Japan (2010-274731) which were issued unopposed. In Canada, a notice of allowance has been issued for CPA 2488-057 titled "Hair Follicle Mesenchymal Stem Cells and use thereof". Additional related patent applications are also pending in other jurisdictions.

RepliCel has also entered into a technology transfer, licensing and collaboration agreement with Shiseido Company, Limited, one of the world's largest cosmetic companies. Both companies will work towards establishing a clinical research program in Asia, with the goal of increasing the available human clinical data on RCH-01. Collaborative technology transfer will continue between the companies as any new improvements to the RCH-01 technology are developed by either party. This agreement gives Shiseido an exclusive geographic license to use RepliCel's RCH-01 hair regeneration technology in Japan, China, South Korea, Taiwan and the ASEAN countries representing a population of approximately 2.1 billion people.

RCI-02: Dermal Injector Device

To support our RCH-01 and RCS-01 products, RepliCel is developing a second generation dermal injector device. The RCI-02 Injector, now in production design, will be able to deliver programmable volumes of substances not only into specific layers of the skin, but also into muscle tissues in a slow and constant form without any pressure or shear stress, ensuring the injected substance is viable and healthy after application. By improving the conditions of substance delivery, we improve the chances of success in the treatment of the patient. A significant feature of the new device is the incorporation of a cooling element at the injection site, thus removing the need for an anesthetic. This is a significant improvement over current syringe-type devices where an anesthetic is required prior to injection.

The company believes that this device will have applications in certain other dermatological procedures requiring injections of specific volumes of material at specific depths and as such, will look at licensing opportunities in these areas. In addition to the programmable variables of volume and depth, the device will also have interchangeable heads for different injection procedures (single and multi-needle). Development is expected to be completed in 2014. We have filed patent applications relating to devices for the delivery of therapeutically useful cells, as well as to compositions and methods for repairing tendons.

Intellectual Property

Hair Follicle NBDS Fibroblast Therapy for Chronic Tendinosis

RepliCel has developed and filed patent applications relating to compositions and methods suitable for the treatment and repair of tendons utilizing non-bulbar dermal sheath cells. In addition, similar patent applications have been filed in the area of skin repair and other many other yet disclosed indications. RepliCel has also licensed a family of patents relating the compositions and uses of dermally derived cells in the treatment of tendons and ligaments.

Hair Follicle Dermal Sheath Cup Cell Therapy Treatment for Androgenetic Alopecia

Patents have been filed on the use of hair follicle derived stem cells (see EP 1 509 597 B1) entitled "Method for isolating hair follicle mesenchymal stem cells". This family of patents describes methods for isolating stem cells from hair follicles, and the growth and use of these stem cells for the treatment of a variety of medical conditions (including hair loss). Within this portfolio, there are granted patents in Australia (AU 2003246521), Europe (EP1 509 597 B1), the United States (8,431,400) and Japan (2010-274731) which were issued unopposed. In Canada, a notice of allowance has been issued for CPA 2488-057 titled "Hair Follicle Mesenchymal Stem Cells and use thereof". Additional related patent applications are also pending in other jurisdictions.

Dermatology Injector Device

RepliCel has also filed patent applications relating to devices for the delivery of therapeutically useful cells, as well as to compositions and methods for repairing tendons.

Investor Relations

On February 26, 2014, the Company entered into an agreement with Ubika Communication, a division of Ubika Corporation to provide capital market exposure. Ubika Communication provides capital market exposure services via their flagship website portal smallcapower.com (SCP) which is also featured on the Financial Post website. SCP represents a unique way for small cap companies to bridge between the traditional investor relations business model and the online world that is becoming increasingly important for maximizing shareholder value.

On September 1, 2013, the Company entered into an agreement with Westwicke Partners as its investor relations agency to assist in the company's communications with investors. Westwicke Partners provides strategic investor relations and capital markets advisory services exclusively to public and private companies in the healthcare sector. With offices in Baltimore, San Francisco and San Diego, the firm works with over 50 public and private companies across all subsectors of healthcare. Services provided by Westwicke include corporate message and positioning, investor presentation review, sell side relationship building, buy side targeting, earnings call preparation, capital markets advisory, pre-IPO planning and execution, and investor day meetings. All of Westwicke's senior professionals have extensive Wall Street experience as former sell side and buy side research analysts, portfolio managers, investment bankers, institutional sales people, and equity capital markets professionals. The firm works with its clients to help position their story properly within the investment community, raise their visibility on Wall Street, and develop value-added strategies to build a quality, long-term shareholder base and enhance equity market value. For additional information about Westwicke please visit www.westwicke.com.

Reverse Takeover Transaction and 583885 B.C. Ltd.

On December 22, 2010, RepliCel closed a Share Exchange Agreement with TrichoScience Innovations Inc. ("TrichoScience") whereby RepliCel (formerly Newcastle Resources Ltd.) acquired the issued and outstanding shares of TrichoScience. Concurrent with the reverse acquisition, RepliCel also acquired all of the issued and outstanding common shares of 583885 B.C. Ltd. ("583885") in exchange for 4,400,000 common shares of RepliCel. 583885 did not have any assets or liabilities at the date of acquisition and was a private company controlled by RepliCel's incoming Chief Executive Officer ("CEO"). 3,400,000 shares of RepliCel controlled by the Company's CEO were deposited with an escrow agent pursuant to the terms of an escrow agreement between RepliCel and the escrow agent. These shares are released upon satisfaction of certain performance conditions as set out in the escrow agreement and each release of shares from escrow will be considered a compensatory award. The Compensatory award is recorded as an expense at the fair value of the consideration given based on the price of RepliCel's common shares on the acquisition date. This amount was determined to be US\$0.50 per share, based on the price of the shares being offered in the private placement that closed concurrent with the share exchange to arm's length parties at a price of US\$0.50.

At March 31, 2014, there were 1,700,000 common shares held in escrow and no performance conditions were met (Year ended December 31, 2013 no performance conditions were met). Stock based compensation of \$Nil (representing the fair value of the shares issued) was recognized for these shares during the period ended March 31, 2014 (December 31, 2013: \$nil) The other 1,000,000 common shares issued were not subject to escrow provisions and thus were fully vested, non-forfeitable at the date of issuance.

SELECTED ANNUAL INFORMATION

The following financial data summarizes selected financial data for our company prepared in accordance with IFRS as issued by the IASB for the three fiscal years ended December 31, 2013, 2012 and 2011.

	Year ended Dec. 31, 2013 (IFRS) (audited)	Year ended Dec. 31, 2012 (IFRS) (audited)	Year ended Dec. 31, 2011 (IFRS) (audited)
Net sales or total revenues	\$4,120,400	\$Nil	\$Nil
Net income (loss) before tax	\$383,468	\$(3,363,175)	\$(3,713,439)
Income tax	412,040	-	-
Total comprehensive loss	\$(28,572)	\$(3,363,175)	\$(3,713,439)
Basic and diluted loss per share	\$Nil	\$(0.08)	\$(0.10)
Loss attributable to owners of the Parent	\$(28,572)	\$(3,363,175)	\$(3,493,960)
Total assets	\$2,052,401	\$505,488	\$631,419
Long-term liabilities	\$Nil	\$Nil	\$Nil
Dividends declared	\$Nil	\$Nil	\$Nil

DISCUSSION OF OPERATIONS

Three months ended March 31, 2014 compared to three months ended March 31, 2013

	Three months ended March 31,		Change 2014 to 2013	
	2014	2013	Increase/ (Decrease)	Percent Change
Expenses				
Research and development	457,989	179,880	278,109	155%
General and administrative	725,182	516,610	208,572	40%
Other items	1,638	60,689	(59,051)	(97)%
Total loss	1,184,809	757,179	427,630	56%

There was no revenue from operations for the three months ended March 31, 2014 or 2013.

Research and Development expenses totaled \$457,989 for the three months ended March 31, 2014 compared to \$179,880 for the three months ended March 31, 2013. Research expense for the three months ended March 31, 2014 was \$395,872 compared to \$131,593 in the prior year period. The increase was the result of advancing the pre-clinical work for RCT-01, development of the RCI-02 injector device prototype, improvements in the cell replication process for RCH-01 in preparation for our submission to regulatory authorities and incremental expenditure on intellectual property. During the three months ended March 31, 2014, we incurred costs of \$62,117 relating to our clinical trials compared to \$48,287 for the three months ended March 31, 2013. Clinical trial costs have declined as the Company nears the completion and monitoring phase of the Phase I clinical trial for RCH-01. Phase II clinical trials are anticipated to commence for RCH-01 and RCT-01 in the latter half of 2014.

General and administrative expenses totaled \$725,182 for the three months ended March 31, 2014 compared to \$516,610 for the three months ended March 31, 2013. The increase is primarily attributable to an increase in marketing and investor relations activities (2014: \$109,736, 2013: \$18,181), an increase in consulting fees (2014: \$70,500, 2013: \$27,500), and an increase in legal (2014: \$23,880, 2013: \$7,627). These increases are a result of the Company listing on the TSXV and costs associated with the exercise of warrants during the quarter. Stock based compensation increased (2014: \$206,931, 2013: \$167,600) as 900,000 options were issued in the first quarter of 2014.

Total comprehensive loss for the three months ended March 31, 2014 was \$1,184,809 or \$0.03 per share on a basic and diluted basis compared to a net loss of \$757,179 or \$0.02 per share on a basic and diluted basis for the three months ended March 31, 2013.

SUMMARY OF QUARTERLY RESULTS

The following is a summary of our financial results for the eight most recently completed quarters. The figures for the years ended December 31, 2013 and 2012 are calculated from the Company's annual consolidated financial statements prepared under IFRS.

	Mar 31, 2014	Dec 31, 2013	Sept 30, 2013	Jun 30, 2013	Mar 31, 2013	Dec 31, 2012	Sept 30, 2012	Jun 30, 2012
	\$	\$	\$	\$	\$	\$	\$	\$
Revenues	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Net income (loss)	(1,184,809)	(1,041,726)	2,613,456	(843,123)	(757,179)	(934,175)	(36,393)	(1,641,143)
Basic and diluted earnings (loss) per share	(0.03)	(0.02)	0.06	(0.02)	(0.02)	(0.02)	(0.00)	(0.04)

LIQUIDITY AND CAPITAL RESOURCES

Our consolidated financial statements have been prepared on a going concern basis which assumes that the Company will continue to realize its assets and discharge its obligations and commitments in the normal course of operations. At March 31, 2014, the Company had accumulated losses of \$11,446,777 since incorporation and expects to incur further losses in the development of its business, which casts substantial doubt about the Company's ability to continue as a going concern. At March 31, 2014, we had working capital of \$1,117,239. Additional working capital will be required for research and development along with general and administrative expenses and to further our business plans. Our financial statements do not include any adjustments relating to the recoverability and classification of recorded assets, or the amounts of and classification of liabilities that might be necessary in the event that the Company cannot continue as a going concern.

The Company's ability to continue as a going concern is dependent upon its ability to generate future profitable operations and/or to obtain the necessary financing to meet its obligations and repay its liabilities arising from normal business operations when they come due. The Company has financed its operations to date through the issuance of equity. The continued volatility in the financial equity markets may make it difficult to raise funds by private placements of shares. There is no assurance that the Company will be successful with its financing ventures.

Operating Activities

During the three months ended March 31, 2014, \$1,029,536 cash was used in operating activities compared to a use of cash of \$317,514 for the three months ended December 31, 2013. The increase in cash used in operating activities was a result of increased spending on research and development consulting and furthering the Company's intellectual property portfolio in the first quarter of 2014.

Financing Activities

During the three months ended March 31, 2014, we issued 771,812 Common Shares at a price of US\$0.50 per share for gross proceeds of CAD\$429,021. Additional working capital will be required for general and administrative expenses and to further our business plans.

OUTSTANDING SHARE DATA

Issued and Outstanding – Common Shares	Number of Shares
Balance, December 31, 2013	48,118,609
Shares issued for cash:	
- Private placements at CAD\$0.75	4,454,167
- Warrants exercised at US\$0.50	1,508,512
Balance, May 29, 2014	54,081,288

On May 9, 2014 and May 21, 2014, the Company completed private placements consisting of a total of 4,454,167 units (each a "Unit") at a price of \$0.75 per Unit for total gross proceeds of \$3,340,625. Each Unit consists of one common share of the Company (each, a "Share") and one Share purchase warrant, which will entitle the holder to purchase one additional Share for a period of two years from the closing of the private placement at a price of \$1.00 per Share during the first year and \$1.25 per Share during the second year. Finder's fees of \$267,250 were paid in cash and agent's warrants to purchase an aggregate of 313,533 Shares of the Company at a price of \$0.75 per share for a period of 24 months were issued to agents on the transaction.

Stock Option Plan

On May 21, 2014, the Company approved a Stock Option Plan whereby the Company may grant directors, officers, employees and consultants' stock options. The maximum number of shares reserved for issue under the plan cannot exceed 10% of the outstanding Common Shares as at the date of the grant. The stock options can be exercisable for a maximum of 7 years from the grant date and with various vesting terms.

Company Stock Options

On March 18, 2014 under the Company Stock Option Plan, 600,000 options were granted to employees and consultants of the Company. The options vest over one year and are exercisable at \$0.67 per share until March 18, 2019.

On March 18, 2014, certain optionees forfeited their stock option agreements. As a result, 140,000 Company stock options issued December 22, 2010 exercisable at US\$0.50 and 10,000 Company stock options issued September 5, 2013 exercisable at \$0.55 were forfeited.

On February 20, 2014 under the Company Stock Option Plan, 100,000 options were granted to employees and consultants of the Company. The options vest over one year and are exercisable at \$0.85 per share until February 20, 2021.

On January 2, 2014 under the Company Stock Option Plan, 200,000 options were granted to employees and consultants of the Company. The options vest over three years and are exercisable at \$0.55 per share until January 2, 2019.

On October 28, 2013 under the Company Stock Option Plan, 50,000 options were granted to employees and consultants of the Company. The options vest over one year and are exercisable at \$0.55 per share until October 28, 2020.

On October 5, 2013, certain optionees forfeited their stock option agreements. As a result, 200,000 Company stock options issued March 11, 2011 exercisable at US\$1.00, 715,000 Company stock options issued April 18, 2012 exercisable at US\$1.50, and 100,000 Company stock options issued January 3, 2012 exercisable at US\$2.35, were forfeited.

On September 5, 2013 under the Company Stock Option Plan, 1,310,000 options were granted to employees and consultants of the Company. The options vest over one year and are exercisable at \$0.55 per share until September 5, 2020.

On September 4, 2013, the Company and an optionee amended its stock option agreement dated December 22, 2010. As a result, 275,000 Company stock options exercisable at US\$0.50 were forfeited.

On August 30, 2013, 300,000 options that were granted to a consultant to the Company were forfeited. The options were exercisable at US\$1.10 per share. The options were granted on June 21, 2012 under the Company Stock Option Plan.

On July 11, 2013 under the Company Stock Option Plan, 140,000 options were granted to a consultant of the Company. The options vest over a three year period and are exercisable at \$0.41 per share until July 11, 2018.

As at May 29, 2014 there are 2,867,500 stock options available for exercise with a weighted average exercise price of \$0.70.

Stock Options Outstanding

Grant Date	Number	Weighted Average Exercise Price
July 14, 2010	770,000	US\$0.50
March 11, 2011	900,000	US\$1.00
April 22, 2013	500,000	CAD\$0.41
July 11, 2013	140,000	CAD\$0.41
September 5, 2013	1,300,000	CAD\$0.55
October 28, 2013	50,000	CAD\$0.55
January 2, 2014	200,000	CAD\$0.55
February 20, 2014	100,000	CAD\$0.85
March 18, 2014	600,000	CAD\$0.67
Balance, May 29, 2014	4,560,000	CAD\$0.66

Share Purchase Warrants

Share Purchase Warrants (“Warrants”) granted in February, March and April 2012 entitle the holder to purchase an additional Common Share at US\$0.50 per share for a period of 24 months from the date of grant. In February and March 2014, 771,812 Warrants were exercised that were granted in February, March and April 2012 at US\$0.50 per share. The Company received proceeds of US\$429,021. In April 2014, 736,700 Warrants were exercised that were granted in April 2012 at US\$0.50 per share. The Company received proceeds of US\$368,350. The remaining warrants that were granted February, March and April 2012 that were not exercised have expired.

Warrants issued May 17, 2012 entitle the holder to purchase an additional Common Share at US\$2.00 per share for a period of 48 months from the date of grant.

Warrants issued April 10, 2013 and May 21, 2013 entitle the holder to purchase an additional Common Share at CAD\$0.50 per share for a period of 24 months from the date of grant.

On May 9, 2014 and May 21, 2014, the Company completed private placements consisting of a total of 4,454,167 units (each a “Unit”) at a price of \$0.75 per Unit for total gross proceeds of \$3,340,625. Each Unit consists of one common share of the Company (each, a “Share”) and one Share purchase warrant, which will entitle the holder to

purchase one additional Share for a period of two years from the closing of the private placement at a price of \$1.00 per Share during the first year and \$1.25 per Share during the second year. Finder's fees of \$267,250 were paid in cash and agent's warrants to purchase an aggregate of 313,533 Shares of the Company at a price of \$0.75 per share for a period of 24 months were issued to agents on the transaction.

Share Purchase Warrants Outstanding

Grant Date	Number	Weighted Average Exercise Price
May 17, 2012	250,000	US\$2.00
April 10, 2013	1,643,555	CAD\$0.50
May 21, 2013	400,000	CAD\$0.50
May 9, 2014	3,717,167	CAD\$1.00
May 9, 2014	254,573	CAD\$0.75
May 21, 2014	737,000	CAD\$1.00
May 21, 2014	58,960	CAD\$0.75
Balance, May 29, 2014	7,061,255	CAD\$0.81

Warrants denominated in a currency other than the Company's functional currency meet the definition of a financial liability and accordingly are presented as such on the Company's consolidated statement of financial position and are fair valued at each reporting period.

RELATED PARTY TRANSACTIONS

As at March 31, 2014, included in the accounts payable and accrued liabilities, were \$25,086 (December 31, 2013: \$27,736) due to directors and/or officers of the Company and/or companies they control or of which they were significant shareholders for research and development and consulting fees. The amounts owing are unsecured, non-interest bearing and due on demand.

During the three months ended March 31, 2014 and 2013, the Company had the following related party transactions:

- Research and development costs totalling \$56,822 (March 31, 2013 - \$53,487) were paid to companies owned by directors and officers of the Company;
- The Company considers key management to be the Chief Executive Officer, Chief Financial Officer and executive directors. Salaries totalling \$101,250 (March 31, 2013 - \$101,250) and stock-based compensation totalling \$26,754 (March 31, 2013 - \$32,970) were paid to key management.

These transactions were in the normal course of operations having been measured at the exchange amount, being the amount established and agreed to by the parties.

OFF BALANCE SHEET ARRANGEMENTS

None.

PROPOSED TRANSACTIONS

None.

EVENTS AFTER THE REPORTING DATE

Subsequent to March 31, 2014, 736,700 Warrants denominated in a foreign currency were exercised that were granted in April 2012 at US\$0.50 per share. The Company received gross proceeds of US\$368,350.

Subsequent to March 31, 2014, the Company completed private placements consisting of a total of 4,454,167 units (each a "Unit") at a price of \$0.75 per Unit for total gross proceeds of \$3,340,625. Each Unit consists of one common share of the Company (each, a "Share") and one Share purchase warrant, which will entitle the holder to purchase one additional Share for a period of two years from the closing of the private placement at a price of \$1.00 per Share during the first year and \$1.25 per Share during the second year. Finder's fees of \$267,250 were paid in cash and agent's warrants to purchase an aggregate of 313,533 Shares of the Company at a price of \$0.75 per share for a period of 24 months were issued to agents on the transaction.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

RepliCel Life Sciences Inc. makes estimates and assumptions about the future that affect the reported amounts of assets and liabilities. Estimates and judgments are continually evaluated based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. In the future, actual experience may differ from these estimates and assumptions.

The effect of a change in an accounting estimate is recognized prospectively by including it in comprehensive income in the period of the change, if the change affects that period only, or in the period of the change and future periods, if the change affects both.

Information about critical judgments in applying accounting policies that have the most significant risk of causing material adjustment to the amounts reported in these financial statements are discussed below:

Share Based Payments

The Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the share option, volatility and dividend yield and making assumptions about them. The assumptions and models used for estimating the fair value for share-based payment transactions are disclosed in Note 7(d).

Similar methodology to the share-based payments is used to determine the fair value of derivative liabilities related to warrants denominated in U.S. dollars. The assumptions and models used for estimating the fair value for derivative liabilities are disclosed in Note 7(g).

Income Taxes

Significant judgment is required in determining the provision for income taxes. There are many transactions and calculations undertaken during the ordinary course of business for which the ultimate tax determination is uncertain. The Company recognizes liabilities and contingencies for anticipated tax audit issues based on the Company's current understanding of the tax law. For matters where it is probable that an adjustment will be made, the Company records its best estimate of the tax liability including the related interest and penalties in the current tax provision. Management believes they have adequately provided for the probable outcome of these matters; however, the final outcome may result in a materially different outcome than the amount included in the tax liabilities.

In addition, the Company will recognize deferred tax assets relating to tax losses carried forward to the extent there are sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity against which the unused tax losses can be utilized. However, utilization of the tax losses also depends on the ability of the taxable entity to satisfy certain tests at the time the losses are recouped.

SIGNIFICANT ACCOUNTING POLICIES

The Company's significant accounting policies can be found in Note 4 of the annual audited consolidated financial statements for the year ended December 31, 2013.

ACCOUNTING STANDARDS, AMENDMENTS AND INTERPRETATIONS NOT YET EFFECTIVE

Certain pronouncements were issued by the IASB or the IFRS Interpretations Committee that are mandatory for accounting periods beginning on or after January 1, 2014 or later periods. The following new standards, amendments and interpretations have been adopted in these condensed consolidated interim financial statements.

- Amendment to IAS 32 Financial Instruments: Presentation

The amendments to IAS 32 pertained to the application guidance on the offsetting of financial assets and financial liabilities, focused on four main areas: the meaning of 'currently has a legally enforceable right of set-off', the application of simultaneous realization and settlement, the offsetting of collateral amounts and the unit of account for applying the offsetting requirements. The standard is effective for annual periods beginning on or after January 1, 2014. The adoption of this standard did not have a material impact on the condensed consolidated interim financial statements.

Standards, Amendments and Interpretations Not Yet Effective

Certain pronouncements were issued by the IASB or the IFRS Interpretations Committee that are not mandatory for accounting periods beginning on or after January 1, 2014. They have not been early adopted in these interim financial statements, are they are expected to affect the Company in the period of initial application. In all cases the Company intends to apply these standards from application date as indicated below:

- Amendment to IFRS 7, Financial Instruments: Disclosure

Amended standard IFRS 7 Financial Instruments: Disclosures outlines the disclosures required when initially applying IFRS 9 Financial Instruments. The standard is effective for annual periods beginning on or after January 1, 2015. The Company is in the process of evaluating the impact that the adoptions of this standard may have on its financial statements.

- IFRS 9 Financial Instruments

IFRS 9 Financial Instruments is part of the IASB's wider project to replace IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 retains but simplifies the mixed measurement model and establishes two primary measurement categories for financial assets: amortized cost and fair value. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. The standard is effective for annual periods beginning on or after January 1, 2015. The Company is in the process of evaluating the impact of the new standard.

There are no other IFRS or IFRIC Interpretations that are not yet effective that would be expected to have a material impact on the Company.

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

As at March 31, 2014, the Company's financial instruments are comprised of cash, accounts payable and accrued liabilities and warrants denominated in a foreign currency. The fair values of cash, accounts payable and accrued liabilities approximate their carrying value due to their short-term maturity. The Company is exposed through its operations to currency, credit, liquidity and interest rate risk.

In common with all other businesses, the Company is exposed to risks that arise from its use of financial instruments. This note describes the Company's objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout these financial statements.

There have been no substantive changes in the Company's exposure to financial instrument risks, its objectives, policies and processes for managing those risks or the methods used to measure them from previous periods unless otherwise stated in this note.

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company has an exposure to the European Euros as certain expenditures and commitments are denominated in European Euros and the Company is subject to fluctuations as a result of exchange rate variations to the extent that transactions are made in this currency. In addition, the Company holds an amount of cash in US dollars and is therefore exposed to exchange rate fluctuations on these cash balances. The Company does not hedge its foreign exchange risk. At March 31, 2014 the Company held US dollar cash balances of \$248,214 (US\$224,527) (December 31, 2013: \$26,385 or US\$24,807). A 1% increase/decrease in the US dollars foreign exchange rate would have an impact of ±\$2,482 (US\$2,245) on the cash balance held March 31, 2014.

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its cash. The Company limits exposure to credit risk by maintaining its cash with large financial institutions. The Company's maximum exposure to credit risk is the carrying value of its financial assets.

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company manages liquidity risk through the management of its capital structure, more specifically, the issuance of new common shares, to ensure there is sufficient capital in order to meet short term business requirements, after taking into account the Company's holdings of cash and potential equity financing opportunities. The Company believes that these sources will be sufficient to cover the known short and long-term requirements at this time. There is no assurance that potential equity financing opportunities will be available to meet these obligations.

The following table sets out the contractual maturities (representing undiscounted contractual cash-flows) of financial liabilities as at March 31, 2014:

Year of expiry	Accounts payable and accrued liabilities		Total
Within 1 year	\$	333,996	\$ 333,996

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. As the Company's cash is currently held in an interest bearing bank account, management considers the interest rate risk to be limited.

RISKS AND UNCERTAINTIES

Risks Relating to our Business

In addition to the other risks and uncertainties set out earlier in this MD&A, the Company is also exposed to the following risks and uncertainties:

Our company currently does not generate revenue from its planned operations, and as a result, it faces a high risk of business failure.

We have not generated any revenues from our planned operations to date. As of March 31, 2014, we had accumulated \$11,446,777 in losses since inception. Our business is focused on the development of a new cell replication technology. In order to generate revenues, we will incur substantial expenses in the development of our business. We therefore expect to incur significant losses in the foreseeable future. Our company recognizes that if we are unable to generate significant revenues from our activities, our entire business may fail. There is no history upon which to base any assumption as to the likelihood that we will be successful in our plan of operation, and we can provide no assurance to investors that we will generate operating revenues or achieve profitable operations in the future.

Our auditors' opinion on our March 31, 2014 financial statements includes an explanatory paragraph in respect of there being substantial doubt about our ability to continue as a going concern.

We have incurred a net loss of \$11,446,777 for the cumulative period from September 7, 2006 (inception) to March 31, 2014. We anticipate generating losses for at least the next 12 months. Therefore, there is substantial doubt about our ability to continue operations in the future as a going concern, as described by our auditors with respect to the financial statements for the three months ended March 31, 2014. Our financial statements do not include any adjustments relating to the recoverability and classification of recorded assets, or the amounts of and classification of liabilities that might be necessary in the event that we cannot continue in existence. Our business operations may fail if our actual cash requirements exceed our estimates and we are not able to obtain further financing. If we cannot continue as a viable entity, our shareholders may lose some or all of their investment in our company.

Our business is at an early stage of development and difficulties obtaining regulatory approval, technical deficiencies and other challenges may hinder the development and marketing of our cell replication technology.

Our cell replication technology is at an early stage of development and we may not develop cell replication technology that can be commercialized. We are still in the early stages of identifying and conducting research on our technology. Our technology will require significant research and development and preclinical and clinical testing prior to regulatory approval, if required, being obtained in the United States or other countries. We may not be able to obtain regulatory approvals, if required, to complete necessary clinical trials for our cell replication technology, or to commercialize it. Our technology may prove to have undesirable and unintended side effects, or other characteristics adversely affecting its safety, efficacy or cost-effectiveness could prevent or limit its use. Our technology may fail to provide its intended benefit, or achieve benefits equal to or better than our competitor's products at the time of testing or production and, if so, our business may fail.

Our clinical trials may fail to produce successful results or could be suspended due to unacceptable safety risks, which could cause our business to fail.

Clinical trials are subject to extensive regulatory requirements, and are very expensive, time-consuming and difficult to design and implement, in part because they may be subject to rigorous regulatory requirements. Our products may fail to achieve necessary safety and efficacy endpoints during clinical trials. We believe that our clinical trials will take a substantial period of time to complete. Furthermore, failure can occur at any stage of the trials, and we could encounter problems that cause us to abandon or repeat clinical trials. The

commencement and completion of clinical trials may be delayed by several factors, including: unforeseen safety issues; lack of effectiveness during clinical trials; slower than expected rates of patient recruitment; and inability to monitor patients adequately during or after treatment. In addition, we or regulatory officials may suspend our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks. If our clinical trials fail to produce successful results, or are suspended due to unacceptable safety risks, our business may fail.

Our success depends on the acceptance of our cell replication technology by the medical community and consumers as a safe and effective solution.

The success of our cell replication technology will depend on its acceptance by potential consumers and the medical community. Because our technology is new in the treatment of pattern baldness and tendinosis, the long term effects of using our new cell replication technology are unknown. The results of short-term clinical trials do not necessarily predict long-term clinical benefit or reveal adverse effects. If results obtained from future commercial experience indicate that our cell replication technology is not as safe or effective as other treatments, adoption of this technology by consumers and the medical community may suffer and our business will be harmed.

If we are not able to effectively protect our existing intellectual property, our business may suffer a material negative impact and may fail.

The success of our company will be dependent on our ability to protect and develop our technology. We currently have registered patents for our cell replication technology in Australia, the European Union, United States and Japan. If we are unable to protect our intellectual property, our business may be materially adversely affected. Further, we cannot be sure that our activities do not and will not infringe on the intellectual property rights of others. If we are compelled to prosecute infringing parties, defend our intellectual property or defend ourselves from intellectual property claims made by others, we may face significant expense and liability, as well as the diversion of management's attention from our business, any of which could negatively impact our business or financial condition.

The successful acquisition and maintenance of patent rights is critical to our business and any failure in this regard could hinder the development and marketing of our technology.

We currently have patent applications pending in several countries around the world. Our pending patent applications may not result in the issuance of any patents. The applications may not be sufficient to meet the statutory requirements for patentability in all cases or may be the subject of interference proceedings by patent offices. These proceedings determine the priority of inventions and, thus, the right to a patent for technology. In the past, our patent applications have experienced delays and our patent applications may be delayed in the future. If others file patent applications or obtain patents similar to those we have licensed, such patents may restrict the use of our discoveries. The risk of third parties obtaining patents and filing patent applications will continue to increase. We cannot predict the ultimate scope and validity of existing patents and patents that may be granted to third parties, nor can we predict the extent to which we may wish or be required to obtain licenses to use such patents, or the availability and cost of acquiring such licenses. To the extent that licenses are required, the owners of the patents could bring legal actions against us to claim damages or to stop our manufacturing and marketing of the affected technology. If we become involved in patent litigation, it could consume a substantial portion of our resources.

Our company may be subject to changes and uncertainties in laws and government regulations.

Our company is subject to regulation by domestic and foreign governmental agencies with respect to many aspects of developing cell replication technology. In addition, relevant new legislation or regulation could occur. Any such new legislation or regulation, the application of laws and regulations from jurisdictions whose laws do not currently apply to our company's business, or the application of existing laws and regulations to

cell replication technology, could have a material adverse effect on our company's business, prospects, financial condition and results of operations.

Risks Relating to our Management

We are dependent on the services of certain key consultants and the loss of any of these key consultants may have a materially adverse effect on our company.

While engaged in the business of developing a new cell replication technology, our company's ability to continue to develop a competitive edge in the marketplace will depend, in large part, on our ability to attract and maintain qualified key management personnel. Competition for such personnel is intense, and we may not be able to attract and retain such personnel. Our company's growth has depended, and in the future will continue to depend, on the efforts of our key management consultants. Loss of any of these people would have a material adverse effect on our company. Currently, our company does not have key-man life insurance.

Conflicts of interest may arise as a result of our company's directors and officers being directors or officers of other life sciences companies.

Certain of our company's directors and officers are, or may become, directors or officers of other life sciences companies. While we are engaged in the business of developing a new cell replication technology, such associations may give rise to conflicts of interest from time to time. Our company's directors are required by law to act honestly and in good faith with a view to our company's best interests and to disclose any interest that they may have in any project or opportunity of our company. If a conflict of interest arises at a meeting of our company's board of directors, any director in a conflict must disclose his interest and abstain from voting on such matter. In determining whether or not our company will participate in any project or opportunity, our company's directors will primarily consider the degree of risk to which our company may be exposed and our financial position at the time.

Our company's by-laws contain provisions indemnifying our officers and directors against all costs, charges and expenses incurred by them.

Our company's by-laws contain provisions limiting the liability of our officers and directors for all acts, receipts, neglects or defaults of themselves and all of our other officers or directors or for any loss, damage or expense incurred by our company which may happen in the execution of the duties of such officers or directors. Such limitations on liability may reduce the likelihood of derivative litigation against our company's officers and directors and may discourage or deter our shareholders from suing our company's officers and directors based upon breaches of their duties to our company, though such an action, if successful, might otherwise benefit our company and our shareholders.

As a majority of our directors and officers are residents of countries other than the United States, investors may find it difficult to enforce, within the United States, any judgments obtained against our company, directors and officers.

We are a British Columbia, Canada company. A majority of our directors and officers are nationals and/or residents of countries other than the United States, and all or a substantial portion of such persons' assets are located outside the United States. Consequently, it may be difficult for United States investors to effect service of process in the United States upon those directors or officers who are not residents of the United States, or to realize in the United States upon judgments of United States courts predicated upon civil liabilities under United States legislation. There is substantial doubt whether an original action based solely upon such civil liabilities could be brought successfully in Canada against any of such persons or our company.

OTHER INFORMATION

The Company's website address is www.replicel.com. Other information relating to the Company may be found on SEDAR at www.sedar.com

BOARD APPROVAL

The board of directors of the Company has approved this MD&A