



HelixBioPharmaCorp.

ANNUAL INFORMATION FORM

October 31, 2016

HELIX BIOPHARMA CORP.

21 St. Clair Avenue East, Suite 1100
Toronto, Ontario, M4T 1L9

Tel: (416) 925-3232
Fax: (416) 925-1551
Web: www.helixbiopharma.com

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FORWARD-LOOKING STATEMENTS

This Annual Information Form (“AIF”) contains forward-looking information (collectively, “forward-looking information”) within the meaning of applicable Canadian securities laws. Forward-looking information means disclosure regarding possible events, conditions or financial performance that is based on assumptions about future economic conditions and courses of action and includes financial projections and estimates; statements regarding plans, goals, objectives, intentions and expectations with respect to the Company’s future business, operations, research and development, including the focus of the Company on L-DOS47 which is the Company’s primary drug candidate, Topical Interferon Alpha-2b and other information relating to future periods. Forward-looking information includes, without limitation, statements concerning (i) the Company’s ability to continue to operate on a going concern basis being dependent mainly on obtaining additional financing; (ii) the Company’s growth and future prospects being dependent mainly on the success of L-DOS47; (iii) the Company’s priority continuing to be L-DOS47; (iv) the Company’s development programs, including but not limited to, extension of the current drug candidate(s) to other indications and the identification and development of further tumour-targeting antibodies for DOS47; (v) the anticipated timeline for completion of enrolment and other matters relating to the Company’s European Phase I/II clinical study for L-DOS47 in Poland, including the number of cohorts required to reach Maximum Tolerable Dose (“MTD”) and the Company’s U.S. Phase I clinical study for L-DOS47, (vi) seeking strategic partner support and therapeutic market opportunities; (vii) the nature, design and timing of future clinical trials (including the Company’s anticipated reassessment of the re-design of the LDOS003 study to focus on advanced stage lung cancer patients by combining L-DOS47 with Vinorelbine/Cisplatin (“VIN/CIS”) and commercialization plans; (viii) future expenditures, insufficiency of the Company’s current cash resources and the need for financing and the Company’s possible response for such matters; (ix) future financing requirements, the seeking of additional funding (including the possible receipt of grants) and anticipated future operating losses; (x) changes in the application of accounting standards and interpretations; and (xi) industry performance, competition (including potential developments relating to immunotherapies and the Company’s possible response to such developments), prospects, and general prevailing business and economic conditions. Forward-looking information can further be identified by the use of forward-looking terminology such as “expects”, “plans”, “designed to”, “potential”, “believe”, “intended”, “continues”, “opportunities”, “anticipated”, “2017”, “2020”, “next”, “ongoing”, “seek”, “objective”, “estimate”, “future”, or the negative thereof or any other variations thereon or comparable terminology referring to future events or results, or that events or conditions “will”, “may”, “could”, “would”, or “should” occur or be achieved, or comparable terminology referring to future events or results.

Forward-looking information includes statements about the future and are inherently uncertain, and are necessarily based upon a number of estimates and assumptions that are also uncertain. Although the Company believes that the expectations reflected in such forward-looking information are reasonable, such statements involve risks and uncertainties, and undue reliance should not be placed on such statements. Forward-looking information, including financial outlooks, are intended to provide information about management’s current plans and expectations regarding future operations, including without limitation, future financing requirements, and may not be appropriate for other purposes. The Company’s actual results could differ materially from those anticipated in the forward-looking information contained in this AIF as a result of numerous known and unknown risks and uncertainties, including, but not limited to:

- the Company’s need for additional capital which may not be available in a timely manner or at all (whether from additional issuances of the Company’s securities, grant applications or otherwise) and which, if not obtained, will have a material adverse impact on the Company and its ability to continue as a going concern;
- the risk that the Company may have to suspend or terminate one or more of its clinical trials for lack of funding, as the Company does not have sufficient funds to complete them and will need to raise additional funding, which is not assured;
- uncertainty as to whether the Company’s drug product candidate(s), especially L-DOS47, will be successfully developed and marketed;
- developments in immunotherapies may result in significant changes in the treatment of cancer and may result in a reduction, which may be significant, in the potential patient population and/or treatment protocols available to chemotherapies and other treatments currently in development, such as the Company’s primary drug product L-DOS47;
- the possibility of dilution to current shareholders from future equity financings;
- the impact of the ongoing volatility in the economic environment which has negatively affected the availability and terms of debt and equity financings and may have a negative effect on the Company’s ability to raise further financing and its research and development initiatives;
- intellectual property risks, including the possibility that patent applications may not result in issued patents, that issued patents may be circumvented or challenged and ultimately struck down, that any expiry of an issued patent, may negatively impact the further development or commercialization of the underlying

technology, and that the Company may not be able to protect its trade secrets or other confidential proprietary information;

- research and development risks, including without limitation, the fact that the Company's drug product candidate(s) are complex compounds and the Company faces difficult challenges in connection with the manufacture of clinical batches, and the risk of obtaining negative findings or factors that may become apparent during the course of research or development, any of which may result in the delay or discontinuation of the research or development projects;
- partnership/strategic alliance risks and the need to secure new strategic relationships, which are both not assured;
- the Company's dependence on third parties, including without limitation, contract research organizations, contract manufacturing organizations, clinical trial consultants, collaborative research consultants, regulatory affairs advisors, and others, whose performance and interdependence can critically affect the Company's performance and the achievement of its milestones;
- the Company's dependence on assurances from third parties regarding licensing of proprietary technology owned by others, including the Company's dependence on its license of the L-DOS47 antibody;
- the need for future clinical trials, the occurrence and success of which cannot be assured, and the fact that results seen in earlier clinical trials may not be repeated in later trials;
- manufacturing risks, the need to manufacture to regulatory standards, uncertainty whether the manufacturing process for the Company's drug candidates can be further scaled-up successfully or at all and the risk that clinical batches of the Company's drug candidate may not be able to be produced in a timely manner or at all, which would have a negative effect on the timing and/or occurrence of planned clinical trials and the potential commercialization of the drug candidates;
- uncertainty as to the size and existence of a market opportunity for, and market acceptance of the Company's drug product candidate(s) including as a result of possible changes in the market for the Company's drug candidates resulting from development in immunotherapies or other future cancer treatments;
- uncertainty as to the availability of raw materials that the Company utilizes to manufacture its products, and in particular, Good Manufacturing Practice ("GMP") grade materials, on acceptable terms or at all, and that the Company may not be able to timely obtain alternative suppliers upon commercially viable terms or at all, which could have a material adverse effect on the further development and commercialization of any or all of the Company's drug product candidate(s);
- product liability and insurance risks;
- the risk of lawsuits and other legal proceedings against the Company;
- the effect of competition, especially from the new immunotherapy treatments for non-small cell lung cancer ("NSCLC");
- the risk of unknown side effects arising from the development, manufacture or use of the Company's products;
- the need to attract and retain key personnel;
- that the Company has no sales, marketing and distribution experience;
- government regulation, including drug price regulation, and the need for regulatory approvals for both the development and profitable commercialization of products, which are not assured;
- risks associated with the fact that the U.S. Food and Drug Administration (the "FDA") and any other regulatory agency that the Company has consulted are not bound by their scientific advice, nor are any approvals given by one regulatory body binding on another;
- rapid technological change and competition from pharmaceutical companies, biotechnology companies and universities, which may make the Company's technology or products obsolete or uncompetitive;
- risks associated with claims, or potential claims, of infringement of third party intellectual property and other proprietary rights;
- the risk of unanticipated expenses;
- the impact on the Company's finances resulting from shifts in foreign exchange rates, credit risk and interest rate risk,

and other risk factors that are discussed above and elsewhere in this AIF or identified in the Company's other public filings under the Company's profile on SEDAR at www.sedar.com, including under the headings "*Forward-Looking Information*" and "*Risk Factors*" in the Company's most recent Management's Discussion and Analysis of Financial Condition and Results of Operations (together the "Helix Risk Factors"), any of which could cause actual results to vary materially from current results or the Company's anticipated future results. Certain material factors, estimates or assumptions have been applied in making forward-looking information in this AIF, including, but not limited to, the safety

and efficacy of the Company's drug product candidate(s); the Company's cost and timing in connection with the Phase I U.S. clinical trial for L-DOS47; the cost and timing for achieving MTD in the Company's European Phase I/II clinical trial for L-DOS47 in Poland; that additional and sufficient financing will be obtained in a timely manner or at all to allow the Company to continue operations; the timely provision of services and supplies or other performance of contracts by third parties; future costs; the absence of any material changes in business strategy or plans, the timely receipt of required regulatory approvals, strategic partner support; and that the Helix Risk Factors will not cause the Company's actual results or events to differ materially from the forward-looking information.

For all of the reasons set forth above, which do not represent an exhaustive list of factors that may affect the forward looking information, investors should not place undue reliance on forward looking information. The forward-looking information is based on the beliefs, assumptions, opinions and expectations of the Company's management at the time they are made, and the Company does not assume any obligation to update any forward-looking information should those beliefs, assumptions, opinions or expectations, or other circumstances change, except as required by law.

Data relevant to estimated market sizes in connection with Company's lead products under development are presented in this AIF. These data have been obtained from a variety of published resources, including published scientific literature, websites and information generally available through publicized means. The Company attempts to source reference data from multiple sources whenever possible for confirmatory purposes. Although the Company believes the data is reliable, the Company has not independently verified the accuracy and completeness of this data.

CORPORATE STRUCTURE

Name, address and incorporation

Helix BioPharma Corp. ("**Helix**" or the "**Company**") is a Canadian corporation which was originally formed upon the amalgamation of International Helix Biotechnologies Inc. and Intercon Pharma Inc. on July 31, 1995. On April 30, 2008, the Company further amalgamated by way of short-form vertical amalgamation under the *CBCA* with Helix Product Developments Inc., 6933912 Canada Ltd., Sensium Technologies Inc. and 6965954 Canada Inc.

The Company's principle corporate offices were recently relocated to 21 St. Clair Avenue East, Unit 1100, Toronto, Ontario, Canada M4T 1L9. The Company's phone number is (416) 925-3232. The Company's website is www.helixbiopharma.com.

Inter-corporate relationships

The following table summarizes the Company's wholly owned subsidiaries as at July 31, 2014:

	Date of Incorporation	Jurisdiction	Ownership
Helix BioPharma Inc.	December 4, 2000	USA	100% by Helix BioPharma Corp
Helix Product Development (Ireland) Limited	March 24, 2004	Ireland	100% by Helix BioPharma Corp
Helix Polska Sp. z o.o.	July 6, 2013	Poland	100% by Helix BioPharma Corp

There were no material amendments to the Company's articles or other constating or established documents in the 2016 fiscal year.

GENERAL DEVELOPMENT OF THE BUSINESS

Helix is transforming into an immuno-oncology company primarily focused in cancer drug development.

The Company is developing products for the treatment and prevention of cancer based on its proprietary technologies. The Company's product development initiatives are focused primarily on technologies that modulate the tumour microenvironment.

To-date, the Company's proprietary technology platform, DOS47 has yielded two new drug product candidates, L-DOS47 and V-DOS47. L-DOS47 is currently under clinical study for the treatment of NSCLC. L-DOS47 has completed extensive preclinical testing and manufacturing development, following which, regulatory approvals were obtained in Poland and the U.S. to conduct Phase I/II and Phase I clinical studies, respectively. Both the LDOS002 European Phase I/II monotherapy clinical study in Poland and the LDOS001 U.S. Phase I study in combination with

pemetrexed/carboplatin, continue to enroll patients. V-DOS47 has been licensed to the Company's wholly owned Polish subsidiary for preclinical and clinical development. The V-DOS47 drug candidate uses the Company's proprietary DOS47 technology conjugated to VEGFR target wide range of cancers.

The Company is actively pursuing additional new antibody based technologies for cell-based therapies. In September 2016 the Company announced that it was developing a novel Chimeric Antigen Receptor T-Cell (CAR-T) therapeutic. The Company believes CEACAM6 specific CAR immune cells may have broad applications in a number of cancer types and is working on two camelid single domain antibodies that target CEACAM6.

Due to a lack of funding, a decision was made by the Company in fiscal 2013 to downsize and eventually close the Saskatoon laboratory which supported the Topical Interferon Alpha-2b drug development program and to focus any ongoing activities associated with this program to sourcing and qualifying alternative interferon alpha-2b raw material samples and finding suitable strategic partner(s) who would be willing to license or acquire the product and support the remaining development costs through to commercial launch. The Company has since ceased all activities related to Topical Interferon Alpha-2b, other than maintaining existing intellectual property associated with Topical Interferon Alpha-2b and entertaining discussions with potential interested parties to license or acquire the technology.

The Company finances its research and development programs primarily from the issuance of its securities. In addition, the Company is also looking at alternative sources of additional financing. The Company has been actively seeking grant money from European authorities for research and development activities in Europe and Poland. The Company recently announced that it had qualified for up to PLN12,506,956 (~CAD4,089,942) in grant money from the Polish National Centre for Research and Development ("PNCRD") to develop V-DOS47.

The Company continues to not have sufficient cash reserves to meet anticipated cash needs for working capital and capital expenditures through the next twelve months. The Company will require additional financing in the very near term. Securing additional sufficient financing continues to be of critical importance to the Company.

Given the possibility of not being able to secure sufficient additional financing, whether on a timely basis or not at all, the Company may be required to reduce, delay or cancel one or more of its planned research and development initiatives, including clinical trials along with further reductions in overhead, any of which could impair the current and future value of the Company.

THREE YEAR HISTORY

Important events which have occurred in the last three fiscal years and the period subsequent to July 31, 2016 up to the date of filing this AIF under the Company's profile on SEDAR at www.sedar.com include the following:

July 31, 2016 to the date of this AIF

- On October 19, 2016, the Company announced a CAR-T poster presentation at the AACR Conference of Tumor Immunology and Immunotherapy entitled: *CAR-T Cells Harboring Camelid Single Domain Antibody Targeting Agent to CEACAM6 Antigen in Pancreatic Cancer*.
- On September 7, 2016, the Company announced the appointment of Dr. Theodore Witek Jr. to the Board of Directors of the Company.
- On August 19, 2016, the Company announced the closing of a private placement for gross proceeds of approximately \$1.0 million.

July 31, 2015 to the date of this AIF

- On July 29, 2016, the Company announced the closing of a private placement for gross proceeds of approximately \$1.8 million.
- On July 21, 2016, the Company wholly owned subsidiary, Helix Polska Sp z.o.o, finalized the grant approval with the Polish National Center for Research and Development to develop V-DOS47 in breast cancer.
- On July 18, 2016, the Company announced an agreement in principle with National Research Council of Canada to collaborate on various immuno-oncology initiatives.

- On June 2, 2016, the Company announced the appointment of Evolution Life Science Partners to act as advisors in any partnering or other collaborative agreements.
- On May 11, 2016, the Company announced first patient had been dosed in its Phase II study in non-small cell lung cancer in Poland.
- On May 9, 2016, the Company announced that its wholly owned subsidiary in Poland, Helix Polska Sp z.o.o, qualified for a \$4.1 million government grant from the Polish National Center for Research and Development to develop V-DOS47 in breast cancer.
- On April 29, 2016, the Company announced the closing of a private placement for gross proceeds of approximately \$4.7 million.
- On April 28, 2016, the Company announced first patient enrollment in the Phase II study of L-DOS47 in non-small cell lung cancer, in Poland.
- On April 21, 2016, the Company received approval from the trial steering committee who recommended the initiation of the Phase II study in non-small cell lung cancer in Poland.
- On April 20, 2016, the Company announced the appointments of Dr. Patrick Frankham to Chief Operating Officer and promoted Mr. Steve Demas to Chief Medical Officer.
- On March 29, 2016, the Company announced that Dr. Zbigniew Markowski, was stepping down from his roles as Chief Executive Officer of the Company and Chairman of the Company's wholly owned subsidiary, Helix Polska. Stepping into both roles, effective immediately was Dr. Sven Rohmann.
- On March 8, 2016, the Company announced the approved amendment by The Registration Office of Medicinal Products, Medical Devices and Biocides in Poland for the Company's Phase I/II study defining the dose and dosing regimen for the Phase II portion of the study. The following changes were approved:
 - No further escalations of L-DOS47 past cohort sixteen. Assuming no further dose-limiting toxicities, the cohort sixteen dose of 13.55 microgram per kilogram would be the dose administered to patients in the phase II dose.
 - The safety profile supported a more frequent administration of L-DOS47, twice weekly over 14 days (days one, four, eight, 11) followed by a seven-day rest.
 - An increase in the number of patients in the Phase II study to 45 patients. Based on Simon's optimal two-stage design, 17 evaluable patients are to be enrolled in the first stage of the Phase II component of the study. If there is/are greater than or equal to one response(s) out of these initial 17 evaluable patients, 22 additional evaluable patients would need to be enrolled. To obtain 39 patients evaluable for response, enrolment of approximately 45 patients are required.
- On March 3, 2016, the Company announced the completed review safety data and has recommended the opening of patient screening for the sixteenth-dose-level cohort in its continuing Phase I/II clinical safety, tolerability and preliminary efficacy study of L-DOS47 in Poland.
- On February 4, 2016, the Company appointed Dr. Zbigniew Markowski as Chairman of the Board of Helix, Polska, a wholly owned subsidiary of the Company.
- On January 29, 2016, the Company announced the appointment of Messrs. Albert Beraldo and Dr. George J. Anders to the Board of Directors replacing Messrs. Gary Littlejohn and Yvon Bastien who tendered their resignations.
- On January 21, 2016, the Company announced that it had initiated enrollment in the second dosing cohort of its U.S. Phase I combination study of its L-DOS47 lung cancer drug candidate.
- On January 12, 2016 the Company appointed Dr. Zbigniew Markowski, as Chief Executive Officer, replacing Gary Littlejohn who was serving as Interim Chief Executive Officer.
- On January 6, 2016, the Company announced the granting of a worldwide exclusive licence for v-DOS47, an antibody DOS47 conjugate that targets the vascular endothelial growth factor 2 receptor (VEGFR2), to its wholly owned subsidiary, Helix Polska.

- On December 23, 2015, the Company announced that it had initiated enrollment in the fifteenth cohort of the Company's Polish Phase I/II clinical study of its L-DOS47 lung cancer drug candidate.
- On December 16, 2015, at the Company's annual general meeting, Messrs. Yvon Bastien, Sylwester Cacek, Gary Littlejohn, Slawomir Majewski, Marek Orłowski and Sven Rohmann, were elected to the Board by shareholders.
- On November 4, 2015, the Company announced that it had initiated enrollment in the fourteenth cohort of the Company's Polish Phase I/II clinical study of its L-DOS47 lung cancer drug candidate.
- On September 30, 2015, the Company announced the appointment of Gary Littlejohn to the Board of Directors, effective September 23, 2015 and as a consultant to the Company, effective September 29, 2015 in order to facilitate a smooth leadership transition while the Company searches for a new permanent president and chief executive officer. Mr. Littlejohn was subsequently appointed Interim Chief Executive Officer as of November 1, 2015.
- On September 30, 2014, the Company announced the completion of a second interim review of data collected to date in its ongoing European Phase I/II clinical study of L-DOS47 in Poland;
- On September 23, 2015, the Company announced the voluntary resignation of Stacy L. Wills from the Board of Directors, effective September 25, 2015.
- On September 19, 2015, the Company announced the resignation of the Company's President and Chief Executive Officer, effective November 1, 2015 and as a member of the Board of Directors, effective immediately.
- On September 8, 2015, the Company announced the presentation and update of the ongoing clinical study LDOS002 for the Company's drug candidate L-DOS47 during the 16th World Conference on Lung Cancer held in Denver Colorado. The presentation included the following data:
 - forty (40) patients were enrolled in the first twelve dosing cohorts;
 - L-DOS47 was well tolerated at the dose levels up to 4.33 µg/kg;
 - no Dose Limiting Toxicities ("DLT") were reported for Cohorts 1-12;
 - one (1) DLT was reported for Cohort 13;
 - adverse events reported to date were expected for the population under study;
 - twenty-one (21) of forty (40) patients had an overall response of stable disease based on radiological assessment after completing two cycles of L-DOS47;
 - eleven (11) of these 21 patients continued with a response of stable disease based on radiological assessment after completing four cycles of L-DOS47;
 - one patient in cohort 9 was dosed for ten (10) cycles (approximately seven (7) months) without disease progression;
 - the study is currently enrolling patients in the thirteen dosing cohort (5.76 µg/kg).

Fiscal year ended July 31, 2015

- On June 22, 2015, the Company announced the commencement of enrollment for the thirteenth cohort in the Polish Phase I/II clinical study of its lung cancer drug candidate L-DOS47.
- On May 19, 2015, the Company announced the appointment of The Trout Group as investor relations advisors.
- On April 29, 2015, the Company announced the closing of the second tranche private placement for net proceeds of approximately \$3,100,000. The terms of the private placement are for the purchase of common shares at \$1.10 per share and include one warrant per share at an exercise price of \$1.54 and have an expiry of five years from the date of issue. Together with the previously announced closing of a separate private placement on April 1, 2015, the total amount raised during this round of financing was approximately \$8,300,000.
- On April 22, 2015, the Company provided an update of the U.S. Phase I clinical study, which included the dosing of the first patient and the initiation of three clinical centres: The University of Texas, M.D. Anderson Cancer Center; Penn State Milton S. Hershey Medical Center and the University Hospitals Case Medical Center.

- On April 7, 2015, the Company announced the commencement of enrollment for the twelfth cohort in the Polish Phase I/II clinical study of its lung cancer drug candidate L-DOS47.
- On March 16, 2015, the Company announced receipt of subscription agreements for net proceeds of approximately \$5,200,000. The terms of the private placement are for the purchase of common shares at \$1.10 per share and include one warrant per share at an exercise price of \$1.54 and have an expiry of five years from the date of issue. The Company, on April 1, 2015 announced the closing of the first tranche of private placement subscriptions in addition to having received a net \$3,900,000 in additional private placement subscriptions for a net total of \$9,100,000.
- On February 17, 2015, the Company announced the commencement of enrollment for the eleventh cohort in the Polish Phase I/II clinical study of its lung cancer drug candidate L-DOS47.
- On December 22, 2014, the Company announced the initiation of its first clinical site for the U.S. Phase I study of L-DOS47 in combination with pemetrexed/carboplatin in patients with Stage 4 recurrent or metastatic non-squamous NSCLC at the University of Texas, M.D. Andersen Cancer Centre.
- On December 18, 2014, at the Company's annual general meeting, Messrs. Yvon Bastien, Sylwester Cacek, Slawomir Majewski, Marek Orłowski, Sven Rohmann, Robert A. Verhagen and Stacy L. Wills were elected to the Board by shareholders.
- On December 12, 2014, the Company announced that it had retained the advisory services of Cantor Fitzgerald & Co. to assist the Company in exploring growth opportunities.
- On September 30, 2014, the Company announced the completion of a further interim data review for the first eight cohorts for the LDOS002 study. The review included all available data, including patient demographics, safety assessments, PK data, immunogenicity and radiological tumour assessments. The following observations were made:
 - adverse events reported are those expected for investigational product and population under study;
 - no DLTs have been reported;
 - stable disease observed in radiological assessments of 12 of 24 (50%) of patients treated; and
 - two patients completed six cycles of treatment each.

Fiscal year ended July 31, 2014

- On July 21, 2014, the Company announced the appointment of Mr. Yvon Bastien as new independent Chairman of the Board of Directors, effective July 17, 2014.
- On July 15, 2014, the Company announced the commencement of enrollment for the ninth cohort in the Polish Phase I/II clinical study of its lung cancer drug candidate L-DOS47.
- On July 11, 2014, the Company announced the completion of a private placement with net proceeds in excess of \$5.4 million. The terms of the Private Placement are for the purchase of common shares at \$1.60 per share and include one warrant per share at an exercise price of \$2.24 and have an expiry of five years from the date of issue.
- On May 14, 2014, the Company announced the submission of a clinical trial application with Health Canada for approval to initiate a phase I clinical trial with L-DOS47.
- On April 22, 2014, the Company announced that it had received approval from the FDA to initiate a phase I clinical study of L-DOS47 previously announced by the Company on April 3, 2014.
- On April 7, 2014, the Company announced the commencement of enrollment for the eighth cohort in the Polish Phase I/II clinical study of its lung cancer drug candidate L-DOS47.
- On April 3, 2014, the Company announced the submission of an investigational new drug with the FDA for approval to initiate a phase I clinical study of L-DOS47 entitled, "A phase 1, open label, dose escalation study of immunoconjugate L-DOS47 in combination with standard doublet therapy of Pemetrexed/Carboplatin in patients with Stage 4 (TNM M1a and M1b) recurrent or metastatic non-squamous non-small-cell lung cancer".
- On March 11, 2014, the Company announced the appointment of Mr. Sylwester Cacek to the Board of Directors following the Board's acceptance of Mr. Slawomir Ludwikowski resignation from the Board. In

addition, the Company also announced, that Mr. Andreas Kandziora would be acting as observer to the Board of Directors.

- On February 18, 2014, the Company announced the commencement of enrollment for the seventh cohort in the Polish Phase I/II clinical study of its lung cancer drug candidate L-DOS47.
- On January 22, 2014, the Company announced the commencement of enrollment for the sixth cohort in the Polish Phase I/II clinical study of its lung cancer drug candidate L-DOS47.
- On January 10, 2014, the Company announced that Mr. Orlowski, a director of the Company purchased an additional 1,000,000 common shares of the Company.
- On December 18, 2013, at the Company's annual general meeting, Messrs. Yvon Bastien and Sven Rohmann were elected to the Board by shareholders.
- On December 17, 2013, the Company announced the resignation of Mr. Mario Gobbo from the Board of Directors.
- On December 6, 2013, the Company announced the termination of Mr. John Docherty, the Company's former President and COO, effective immediately.
- On October 28, 2013, the Company announced receipt of subscription agreements for net proceeds of approximately \$4,600,000. The terms of the Private Placement are for the purchase of common shares at \$1.15 per share and include one warrant per share at an exercise price of \$1.61 and have an expiry of five years from the date of issue. The Company, on November 4, 2013 announced the closing of the private placement.
- On October 15, 2013, the Company announced the completion of an interim review of data collected to date in its ongoing European Phase I/II clinical study of L-DOS47 in Poland;
- On August 23, 2013, the Company announced the extension of the expiry date for those warrants issued on September 8, 2009 for an additional 12 months, from September 7, 2013 to September 7, 2014 and an increase in the exercise price of such warrants from \$2.87 to \$3.51.
- On August 9, 2013, the Company announced the extension of the expiry date for those warrants issued on August 6, 2010 for an additional 18 months, from August 5, 2013 to February 5, 2015 and an increase in the exercise price of such warrants from \$3.40 to \$4.16.

NARRATIVE DESCRIPTION OF THE BUSINESS

Helix is transforming into an immuno-oncology company primarily focused in cancer drug development. The Company is developing products for the treatment and prevention of cancer based on its proprietary technologies. The Company's product development initiatives are focused primarily on technologies that modulate the tumour microenvironment.

To-date, the Company's proprietary technology platform, DOS47 has yielded two new drug product candidates, L-DOS47 and V-DOS47. L-DOS47 is currently under clinical study for the treatment of NSCLC. L-DOS47 has completed extensive preclinical testing and manufacturing development, following which, regulatory approvals were obtained in Poland and the U.S. to conduct Phase I/II and Phase I clinical studies, respectively. Both the LDOS002 European Phase I/II monotherapy clinical study in Poland and the LDOS001 U.S. Phase I study in combination with pemetrexed/carboplatin, continue to enroll patients. V-DOS47 has been licensed to the Company's wholly owned Polish subsidiary for preclinical and clinical development. The V-DOS47 drug candidate uses the Company's proprietary DOS47 technology conjugated to VEGFR target wide range of cancers.

The Company continues to actively pursue additional new antibody based technologies for cell-based therapies. In September 2016 the Company announced that it was developing a novel Chimeric Antigen Receptor T-Cell (CAR-T) therapeutic. The Company believes CEACAM6 specific CAR immune cells may have broad applications in a number of cancer types and is working on two camelid single domain antibodies that target CEACAM6.

The Company currently believes that its growth and future prospects are mainly dependent on the success of its DOS47 drug product candidates, and the successful development of cell-based therapies.

Due to a lack of funding, a decision was made by the Company in fiscal 2013 to downsize and eventually close the Saskatoon laboratory which supported the Topical Interferon Alpha-2b drug development program and to focus any ongoing activities associated with this program to sourcing and qualifying alternative interferon alpha-2b raw material samples and finding suitable strategic partner(s) who would be willing to license or acquire the product and support the remaining development costs through to commercial launch. The Company has since ceased all activities related to Topical Interferon Alpha-2b, other than maintaining existing intellectual property associated with Topical Interferon Alpha-2b and entertaining discussions with potential interested parties to license or acquire the technology.

The Company expects to incur additional losses for the foreseeable future and will require additional financial resources to fund the Company's ongoing research and development activities and overhead costs.

The Company finances its research and development programs primarily from the issuance of its securities. In addition, the Company is also looking at alternative sources of additional financing. The Company has been actively seeking grant money from European authorities for research and development activities in Europe and Poland. The Company recently announced that it had qualified for up to PLN12,506,956 (~CAD4,089,942) in grant money from the Polish National Centre for Research and Development ("PNCRD") to develop V-DOS47. There can be no assurance that the Company will be successful in qualifying and/or receiving any additional grant money or that it will obtain additional financing.

The Company continues to not have sufficient cash reserves to meet anticipated cash needs for working capital and capital expenditures through the next twelve months. The Company's cash reserves as at July 31, 2016 of \$3,654,000 are not sufficient to see the current research and development initiatives through to completion let alone commence or properly allocate scarce cash resources efficiently and as such, the Company will require additional financing in the very near term. Securing additional sufficient financing continues to be of critical importance to the Company.

Given the possibility of not being able to secure sufficient additional financing, whether on a timely basis or not at all, the Company may be required to reduce, delay or cancel one or more of its planned research and development initiatives, including clinical trials along with further reductions in overhead, any of which could impair the current and future value of the Company.

RESEARCH AND DEVELOPMENT ACTIVITIES

Background

The immune system utilizes two strategies in attacking different types of pathogens. The humoral immune system uses antibodies as its main weapon. Antibodies are proteins that bind to extracellular foreign invaders, such as bacteria, and lead to their destruction. The cellular immune system utilizes specialized immune cells, called T-cells to identify and bind to abnormal cells and subsequently destroy them.

Cancer cells have adopted and developed several strategies for evading the immune system. In some cases, proteins are expressed on the surface of tumour cells that "turn off" attacking T-cells. By using antibodies to block these interactions (such as anti-PD1), T-cells are reactivated to kill the tumours. Although anti-PD1 and anti-PDL1 therapies (checkpoint inhibitors) have improved outcomes for patients, there are many that do not respond to these treatments. One possible explanation suggests that the unique metabolism of cancer cells creates an acidic tumour microenvironment and this acidity has the effect of interfering with T-cell function. The Company believes it has developed a novel system to raise pH at the tumour site, thus breaking the physiologic barrier that acts to defend against tumour-killing T-cells.

Alkalization using Urease

Urease is an enzyme that catalyzes the hydrolysis of urea into carbon dioxide and ammonia ((NH₂)₂CO + H₂O → CO₂ + 2NH₃). The Company has conjugated urease to an antibody that specifically targets lung cancer cells, thus delivering the urease directly to the site of the tumour. L-DOS47, the Company's first drug product candidate, is currently in a phase I/II monotherapy trial in Poland and a Phase I combination trial with carboplatin and pemetrexed in the United States. By delivering urease to the tumour site, the company expects the pH of the tumour microenvironment to increase and activity of tumour-killing T-cells to be enhanced. The Company believes the urease system can be used with any tumour specific antibody as a general method for modifying the tumour microenvironment, and as such, could be combined with any of the current checkpoint inhibitor products to improve patient outcomes.

CAR-T Cells

To date, success in Adoptive Cell Transfer (ACT) with engineered T-cells such as Chimeric Antigen Receptor T-cells (CAR-T) has occurred mainly in the area of hematological cancers. As the pH of human blood is carefully balanced, and normally not acidic, T-cells appear to remain active. Solid tumours on the other hand, have created challenges and as such, it is hypothesized that the failure of CAR-T therapies to-date may be the result of the acidic tumour microenvironment surrounding the cancer cell that inhibits CAR T-cell activity. The Company believes it is well positioned to use its proprietary urease-antibody technology to alkalize the tumour microenvironment and improve the ability of CAR-T cells to destroy solid tumours.

Check Point Inhibitors

Dr. Robert J. Gillies of the Moffitt Cancer Center in Tampa Florida demonstrated some interesting results when treating acidic tumours in animal models. Dr. Gillies demonstrated that in alkalized tumour cells, the activity of antibodies that target PD-L1, is enhanced. This would indicate that tumour acidosis may protect tumours from immune check-point inhibitors. Since tumour acidosis is experimentally shown to occur in cancers such as breast, colon, lung and pancreas, the Company believes methodologies that can alkalize the tumour microenvironment, such as the Company's proprietary DOS47 platform technology, may work beneficially with check-point inhibitors.

DOS47 – A broad anti-cancer therapeutic platform

DOS47 is based upon a naturally occurring enzyme isolated from the jack-bean plant called urease that breaks down a natural substance found in the body, urea, into metabolites that include ammonia and hydroxyl ions. By doing so at the site of cancerous tissues in the body, the Company believes DOS47 can modify the micro environmental conditions of cancerous cells in a manner that leads to apoptosis.

DOS47 stimulates an increase in the pH of the microenvironment surrounding the cancerous cells, effectively reversing the acidic extra-cellular conditions that are believed to act to defend the tumour. This acidic environment can also reduce or negate the effectiveness of some commonly used anti-neoplastic agents. The local production of ammonia at the site of cancerous tissues is thought to readily diffuse into the cancer cells to exert a potent cytotoxic effect by interfering with their critical metabolic functions. Enzymatic action of urease at the site of cancerous cells is potentially repetitive and sustainable due to the plentiful supply of urea.

The Company is pursuing the development of DOS47 both as a monotherapy and as an adjunct therapy in combination with certain chemotherapeutics and/or radiation regimens, with a view to maximizing the DOS47 commercial potential.

DOS47 candidates are produced by conjugating urease with a targeting antibody or antibody fragment that can specifically direct the urease to the surface of a cancer cell. Once docked to the cell, the urease produces ammonia enzymatically through the conversion of urea found throughout the body. These conjugates of antibodies to urease are called DOS47 candidates. By selecting antibodies that are selective to different tumour cell surface receptors, the Company believes that DOS47 candidates can be used in several types of solid tumours.

Tumour Defense Breakers

L-DOS47

The Company believes that its DOS47 candidates may have potential anti-cancer activity by stimulating an increase in the pH of the microenvironment surrounding the cancerous cells. The local production of ammonia at the site of cancerous tissues is thought to readily diffuse into the cancer cells and may exert a potent cytotoxic effect by interfering with their critical metabolic functions. In addition, the Company believes that the use of DOS47 candidates may also have a synergistic effect on the efficacy of other marketed chemotherapeutics, such as vinka alkylid analogues, where low pH can inhibit the cellular uptake of these agents. The Company believes the enzymatic action of urease to increase the pH at the site of cancerous cells is repetitive and sustainable due to the plentiful supply of urea that is furnished by the body.

L-DOS47 is the Company's first targeted therapeutic immune-conjugate under development based on the DOS47 technology.

L-DOS47 is an antibody protein conjugate where the urease component enzymatically converts naturally occurring urea to ammonia. The L-DOS47 drug molecule includes a highly specialized camelid-derived single domain antibody, designed to identify a unique CEACAM6 antigenic site associated with NSCLC cells. By delivering the conjugate in a targeted manner, the Company believes L-DOS47 stimulates an increase in the pH of the microenvironment

surrounding the NSCLC cells, reversing the acidic extra-cellular conditions that are shown to be favourable for cancer cell survival.

L-DOS47 is intended to offer an innovative approach to the first-line treatment of inoperable, locally advanced, recurrent or metastatic NSCLC. However, other emerging therapies, including immunotherapy, may alter the treatment paradigm in NSCLC. Therefore, the eventual approval for L-DOS47 as a first-line treatment for NSCLC will depend on both successful clinical trials and on the treatment landscape shaped by these new therapies. The Company continues to monitor developments in this area and to consider their effect on its L-DOS47 program, including its focus on L-DOS47 as a first-line treatment for NSCLC.

In 2005, the Company entered into a worldwide exclusive license with the National Research Council of Canada (“NRC”), through which it obtained the rights to combine this highly specialized camelid-derived single domain antibody with Helix’s DOS47 technology. As a result, the Company has certain royalty and milestone payment obligations pursuant to the license agreement. The license agreement with the NRC has been filed under the Company’s profile on SEDAR at www.sedar.com. The NRC filed patent applications in respect of the antibody in Canada, the United States and other countries. On March 2, 2011, the NRC was issued a U.S. patent in respect of the antibody.

In addition to being a key for cancer progression by promoting invasiveness and metastatic behaviors of cancer cells, the acidic tumour microenvironment protects cancer cells from immunotherapy by suppressing the proliferation and cytotoxic activities of local immune cells. The interactions of programmed cell death protein 1 (PD-1) on Jurkat cells with its ligand PD-L1 were studied. The human cancer cell lines MDA-MB231 and BxPC-3 were stimulated with Interferon gamma (IFN γ) to express PD-L1 on the cell surface. The IFN γ -stimulated cell lines were found to inhibit IL-2 production in co-incubated Jurkat cells by as much as 40% when compared to non-stimulated cells. The addition of L-DOS47/urea to the culture medium partially restored cytokine production in Jurkat cells, suggesting a potential role of L-DOS47 in the process of PD-1/PD-L1 interactions.

V-DOS47

V-DOS47 is an antibody DOS47 conjugate that targets the vascular endothelial growth factor 2 receptor (VEGFR2). V-DOS47 is the second immuno-oncology drug candidate derived from the Company’s DOS47 technology platform.

In January 2016 the Company granted a world-wide exclusive license for v-DOS47 to its wholly-owned subsidiary, Helix Polska, in Poland. The Company expects that day-to-day development activities in respect of v-DOS47 will be coordinated by Helix Polska with coordination and oversight from some of the Company’s scientists in Canada.

In order to advance the v-DOS47 initiative in Poland the Company will be establishing a wet lab facility with the majority of the funding coming from the recently qualified grant application that was announced by the Company on May 9, 2016. The Company qualified for up to PLN12,506,956 (~CAD4,089,942) in grant money from the PNCRD to develop V-DOS47 for breast cancer.

The Company has previously developed four v-DOS47 research candidates and conducted in vitro feasibility studies to establish the potential clinical applications for these molecules. Helix Polska, is expected to leverage this know-how to develop a V-DOS47 clinical drug product candidate. The Company will assist Helix Polska by sharing its extensive knowledge in GMP manufacturing, preclinical research and clinical experiences. Helix Polska will collaborate with several Polish institutes through the grant to complete the development of the first v-DOS47 clinical drug product candidate. The development of the clinical drug product candidate for Phase I testing is expected to take two to three years. The actual duration of the development process will depend on successful completion of preclinical research favorable for clinical testing and establishment of cGMP manufacturing processes. The Company expects to enter clinical trials in 2018 provided success is achieved during the preclinical and there are sufficient funds.

Tumour Attack Agents

For years, the four cornerstones of cancer treatment have been surgery, chemotherapy, radiation therapy and molecular targeted therapy. Despite years of false starts, excitement is growing for immunotherapy approaches - therapies that harness the power of a patient’s immune system to combat their disease, or what some in the research community are calling the “fifth pillar” of cancer treatment.

The Company is leveraging its know-how in manipulating the tumour microenvironment, and its expertise in developing unique single domain antibody therapeutics to develop Chimeric Antigen Receptors (“CAR”) for engineered T cell based treatment (“CAR-T”). CAR-T is a novel cell based treatment that uniquely leverages the patient’s immune system to treat cancer. In one application, the patient’s T cells are isolated and then transformed with specific CAR that recognize the cancer. The transformed T cells or CAR-Ts are infused back into the patient to effect the treatment. Currently, a

number of companies including large pharmaceutical companies are developing CAR-T based therapies for blood based and solid tumours. Although this approach, called adoptive cell transfer (“ACT”), has been restricted to small clinical trials so far, treatments using these engineered immune cells have generated some promising responses in patients with advanced cancer. Helix intends to develop CARs for ACT for solid and hematological malignancies. The Company has selected CEACAM6 and VEGFR2 specific CARs for solid tumour. For hematological cancers the Company has selected CD19 and CD22.

The Company is also exploring opportunities for collaboration on complementary technologies to advance Company development in cell based immune-oncology therapies. The Company continues to reach out to third parties in order to identify and test additional tumour-targeting antibodies for conjugation with DOS47. In the event that antibody candidates worthy of further development are identified, the Company will need to discuss development and licensing arrangements, which may not be available on terms acceptable to the Company or at all.

In fiscal 2015, the Company entered into a collaborative research agreement with Afflogic to assess proprietary anti-tumour targeting agents in combination with DOS47. The agreement calls for a feasibility study using a targeting agent in conjugation with DOS47. Continuing development of these new conjugates is subject to a successful feasibility study, execution of a formal development and licensing agreement, and the availability sufficient financial resources.

CAR-T solid tumours

CEACAM 6 specific CARs

Expression of CEACAM6 protein has been reported in a variety of normal human tissues including granulocytes. However, its expression is elevated in many types of solid tumours such as breast, pancreatic, ovarian, lung and colon. CEACAM6 is envisaged as a biomarker and potential therapy target for pancreatic ductal adenocarcinoma and pancreatic intraepithelial neoplasia (Duxbury et al., 2004a, 2004c, 2004d). Recently CEACAM6 is suggested to be check point molecule in multiple myeloma.

The Company believes CEACAM 6 specific CAR immune cells may have broad applications in a number of cancer types. The Company is working on two camelid single domain antibodies that target CEACAM6.

2A3 is a camelid single domain antibody isolated from a whole cancer cell immunized llama library. The antibody binds specifically to the CEACAM6 antigen with high affinity and inhibits the proliferation of CEACAM6-expressing cancer cells *in vitro*. The efficacy of CEACAM6-CAR-T cells in xenograft model was examined *in vivo*. The results strongly support that CEACAM6-CAR-T cells can be used as an effective immunotherapy agent against CEACAM6-expressing cancers, and that camelid single domain antibodies can be easily adopted for CAR-T type therapies.

Vascular epithelial growth factor receptor 2 (VEGFR2) CARs

Most solid tumours and some hematologic malignancies are characterized by an angiogenic phenotype that is an absolute requirement for tumour survival, progression, and metastasis. Therapeutic approaches targeting molecules involved in tumour angiogenesis can inhibit tumour growth. Proliferating endothelial cells in the vessels within solid tumours aberrantly express high levels of angiogenic growth factors, receptors, and adhesion molecules that are absent or barely detectable in established blood vessels, which are normally quiescent. Among these, VEGF and its receptors appear to be the dominant regulators of angiogenesis responsible for the vascularization of normal and neoplastic tissues. Overexpression of VEGF and its receptors is associated with tumour angiogenesis, survival, invasion, metastasis, recurrence, and prognosis in human cancers. VEGF stimulates angiogenesis mainly through VEGFR-2 (also known as Flk1 in mice and KDR in humans), a tyrosine kinase receptor that is overexpressed in tumour endothelial cells and on some tumour cells. Pharmacologic approaches to inhibit VEGF, using monoclonal antibodies or small molecules, are of value in cancer treatment, though the cytostatic rather than cytotoxic nature of these interventions and the redundancy of angiogenic pathways have limited the curative potential of these treatments). The Company believes VEGFR2 specific CAR immune cells may have broad applications in a number of cancer types. Helix is working on two camelid single domain antibodies that target VEGFR2.

CAR-T hematological tumours

CD19

Clinical use of CAR-T cells targeting CD19 are currently being investigated by many other major organizations. Treatment of hematological malignancies appear to be having good responses. The current clinical CD19-CAR T cells were derived from two different anti-CD19 antibodies: FMC63 and SJ25C1. FMC63 was developed by the Zola laboratory at the Flinders Medical Centre in Australia in 1991. It is a mouse monoclonal antibody that was generated

using standard hybridoma technology by immunizing mice with the human polyclonal cell line JVM3. SJ25C1 was developed using standard hybridoma technology by immunizing balb/c mice with a mixture of NALM-1 (CML) and NALM-16 (ALL) cells. Helix and its partners are designing antibodies that it believes, at a minimum, are comparable if not superior to FMC63 and SJ25C1.

The table below summarizes information pertaining to some of the major organizations working in the field.

Academic Institution	Industry Partner	Product	CD19 ab used to develop CAR	Costimulatory molecule used
NCI	Kite Pharma	KTE-C19	FMC63	CD28
U Penn	Novartis	CTL019	FMC63	41BB
Sloan-Kettering	Juno Therapeutics	JCAR015 (and others)	SJ25C1	CD28
N/D	Collectis/Servier/Pfizer	UCART19	N/D	N/D
MD Anderson	Ziopharm Oncology	N/A	FMC63	CD28
Baylor	N/A	N/A	FMC63	CD28

CD22

Although CD19 CAR-T cells have shown remarkable clinical results, some patients either do not respond to treatment or relapse after treatment. In some cases, the relapsing cells no longer express CD19. To treat such disease, the targeting of a second B-cell marker, CD22, has been suggested and is currently being tested in clinical trials. The main CD22 CAR-T program is run by Juno Therapeutics (details below).

The NCI group headed by Rimas Orentas has determined that the most important factor in generating high activity with CD22 CAR-T cells is the membrane-proximal location of the antibody epitope. The m971 (CD22) CAR-T cells show activity similar to FMC63 (CD19) CAR-T cells, whereas CAR-T cells directed to a membrane-distal epitope of CD22 (HA22) have lower activity, but similar affinity for CD22. A similar phenomenon was observed by others. This illustrates the vital importance of selecting anti-CD22 antibodies to the membrane-proximal region of CD22. Based on phage display technology and exploiting the unique features of single domain antibodies, Helix is designing antibodies with this knowledge in mind.

The main CD22 CAR-T program is run by Juno Therapeutics (see table below).

Academic Institution	Industry Partner	Product	CD22 ab used to develop CAR	Costimulatory molecule used
NCI	Juno Therapeutics	JCAR018	m971	N/D

Clinical study initiatives

Regulatory approvals were obtained in Poland and the U.S. to conduct Phase I/II and Phase I clinical studies, respectively, for the treatment of NSCLC. Both the LDOS002 European Phase I/II monotherapy clinical study in Poland and the U.S. LDOS001 Phase I study in combination with pemetrexed/carboplatin, continue to enroll patients. In addition, the Company continues to assess the viability of an LDOS003 clinical study of L-DOS47 in combination with VIN/CIS in patients with metastatic or advanced solid tumours.

U.S. Phase I clinical study (“LDOS001”)

On February 7, 2011, the Company announced it received approval by the FDA to conduct a U.S. Phase I clinical study with L-DOS47. The Company originally planned to commence the L-DOS47 U.S. Phase I study during fiscal 2012 but, given the Company’s limited cash resources, the Company had prioritized the LDOS002 European Phase I/II clinical study with L-DOS47 in Poland while deferring the previously planned commencement of the U.S. Phase I clinical study with L-DOS47.

On April 22, 2014, the Company announced an IND approval by the FDA to commence a study for an L-DOS47 Phase I, open label, dose escalation study in combination with standard doublet therapy of pemetrexed/carboplatin in patients with Stage IV recurrent or metastatic non-squamous NSCLC. The Company has initiated three U.S. sites: Dr. Sarina Piha-Paul at the MD Anderson Cancer Center, Dr. Chandra Belani at Penn State University and the Milton S., Hershey Medical Center, and Dr. Afshin Dowlati at University Hospitals Case Medical Center.

Three patients were successfully dosed at the first L-DOS47 dose level 0.59 µg/kg. On November 18th and 19th, 2015, the Safety Review Committee (SRC) approved the escalation of L-DOS47 to the second dose level 0.78 µg/kg. Three (3) patients have been dosed at this dose level. The SRC has requested an additional patient be dosed at the 0.78 µg/kg level before escalation to the next dose.

Doses of L-DOS47 up to 13.55µg/kg were well tolerated in study LDOS002. As a result, the Company intends to submit an amendment to the LDOS001 protocol to accelerate the dose escalation of L-DOS47 in combination with pemetrexed/carboplatin. There are no guarantees that the Company's submission will be approved by health authorities. The Company also intends to add additional sites to address the slow study enrolment. The Company believes that accelerating the dose escalation and adding sites ought to address the delays in completing the study.

The Company continues to have insufficient cash resources to see the entire LDOS001 U.S. Phase I clinical study through to completion. Given the Company's limited current cash resources and the possibility of not being able to obtain additional financing on a timely basis, the Company may be required to reduce, delay or cancel one or more of its planned research and development programs, including clinical trials along with further reductions in overhead, any of which could impair the current and future value of the business.

European Phase I/II clinical study in Poland ("LDOS002")

On July 25, 2011, Helix announced that the Company had received approval from the Central Register of Clinical Trials at the Polish Ministry of Health to perform a European Phase I/II clinical study with L-DOS47 and, on May 14, 2012, announced that clinical site initiation and patient recruitment activities had commenced for its European Phase I/II clinical study of L-DOS47. On October 23, 2012, the Company announced that its first patient had been enrolled and the first dose had been administered in this study.

The study is being conducted at five Polish centers under the direction of Dr. Dariusz Kowalski at The Maria Sklodowska-Curie Memorial Cancer Centre & Institute of Oncology as the overall coordinating investigator, together with four other principal investigators: Prof. Cezary Szczylik, MD, PhD at the Military Medical Institute, Prof. Elzbieta Wiatr, MD, PhD at the National Tuberculosis and Lung Diseases Research Institute, Dr. Aleksandra Szczensa, MD, PhD at the Mazovian Center of Pulmonary Diseases and Tuberculosis in Otwock and Prof. Rodryg Ramlau, MD, PhD at Med. Polonia Hospital Poznan.

The study is being conducted in patients with inoperable, locally advanced, recurrent or metastatic, non-squamous stage IIIb/IV NSCLC. The study, which is now well underway, recruits patients eligible for inclusion into escalating doses of L-DOS47 given as a monotherapy. The study utilizes an open-label design, allowing for periodic status updates through its course. The study is intended to demonstrate valuable safety and proof-of-concept efficacy data for L-DOS47.

Patients in the study receive weekly doses of L-DOS47, administered as an intravenous infusion over 14 days, followed by seven days' rest (one treatment cycle is three weeks). Once the MTD of L-DOS47 has been determined in Phase I, an estimated 20 patients will be enrolled to evaluate the preliminary efficacy of L-DOS47 in the Phase II portion of the study.

Enrolment in the Phase I component of the study is now complete. A total of 55 male and female patients, at least 18 years of age, with histologically confirmed non-squamous NSCLC were dosed at 16 L-DOS47 dose levels. Patients have an Eastern Cooperative Oncology Group performance status of 0 – 2 at the screening visit for this study, and have at least one site of measurable disease per RECIST v1.1.

The Phase II component enrolls the same patient population as the Phase I. To-date, a total of 10 patients have been enrolled in the Phase II component of the study. After reviewing safety, pharmacokinetic and immunogenicity data, the Polish Competent Authority and Central Ethics Committee did not object to a twice weekly dosing of L-DOS47 over 14 days (Days 1, 4, 8, 11) followed by a 7-day rest in the Phase II component of the study.

The Company, to-date, has completed three interim data reviews in connection with the LDOS002 study.

On October 15, 2013, the Company announced the completion of an interim data review of the first four cohorts for this study. The release stated that L-DOS47 was well tolerated for all patients treated within all cohorts. None of the treatment related adverse events reported to date has met the definition of a dose-limiting toxicity. Adverse events reported as of that date are those normally expected for the population under study.

A review of available pharmacokinetic ("PK") and immunogenicity data showed that these data so far, are consistent with trends seen within pre-clinical animal studies of L-DOS47. Results from these reviews, together with safety data will provide guidance on the treatment schedule and dosing for the Phase II portion of the study. Based on Radiologic Evaluations, patients assigned a status of "Progressive Disease" following any such assessment were withdrawn from the study. At least one patient in each of the four cohorts dosed had a radiological assessment of "Stable Response". Duration of treatment increased with each dose escalation up to Cohort 4. One patient in Cohort 3 was dosed for 6 cycles without disease progression. None of the patients treated to date have had a partial or complete response as defined by RECIST v1.1 definition.

On September 30, 2014, the Company announced the completion of a further interim data review for the first eight cohorts for the LDOS002 study. The review included all available data, including patient demographics, safety assessments, PK data, immunogenicity and radiological tumour assessments. The following observations were made:

- adverse events reported are those expected for investigational product and population under study;
- no Dose Limiting Toxicities ("DLTs") have been reported;
- stable disease observed in radiological assessments of 12 of 24 (50%) of patients treated; and
- two patients completed six cycles of treatment each.

On September 8, 2015, the Company announced the presentation and update of the ongoing clinical study LDOS002 for the Company's drug candidate L-DOS47 during the 16th World Conference on Lung Cancer held in Denver Colorado. The presentation included the following data:

- forty (40) patients were enrolled in the first twelve dosing cohorts;
- L-DOS47 was well tolerated at the dose levels up to 4.33 µg/kg;
- No DLTs were reported for Cohorts 1-12;
- One (1) DLT was reported for Cohort 13;
- adverse events reported to date were expected for the population under study;
- twenty-one (21) of the forty (40) patients had an overall response of stable disease based on radiological assessment after completing two cycles of L-DOS47;
- eleven (11) of these 21 patients continued with a response of stable disease based on radiological assessment after completing four cycles of L-DOS47;
- one patient in cohort 9 was dosed for ten 10 cycles (approximately seven (7) months) without disease progression;
- the study is currently enrolling patients in the thirteen dosing cohort (5.76 µg/kg).

On March 8, 2016, the Company announced the following approved changes by the central ethics committee overseeing the Phase I/II study in Poland as it relates to the Phase II component of the study, which the Company intends to initiate:

- There will be no further escalations of L-DOS47 past cohort 16. If there are no further dose limiting toxicities, the Cohort 16 dose, 13.55 µg/kg, will be the dose administered to patients in the Phase II dose.
- The safety profile supports a more frequent administration of L-DOS47. After reviewing safety, pharmacokinetic and immunogenicity data, L-DOS47 will be dosed twice weekly over 14 days (Days 1, 4, 8, 11) followed by a 7-day rest in the Phase II study.
- The number of patients in the Phase II study will be increased to 45 patients. Based on Simon's optimal two-stage design, seventeen (17) evaluable patients will be enrolled in the first stage of the Phase II component of the study. If there is/are ≥ 1 response(s) out of these initial 17 evaluable patients, twenty-two (22) additional evaluable patients will need to be enrolled. To obtain 39 patients evaluable for response, enrolment of approximately 45 patients are needed.

On April 21, 2016, the Company announced the approval by the Trial Steering Committee to initiate the Phase II component of the LDOS002 study. On April 28, 2016, the Company announced the enrolment of the first patient in the Phase II component of the LDOS002 study. The first Phase II patient was dosed on May 10, 2016 and has now completed their first L-DOS47 cycle.

The Company continues to have insufficient cash resources to see the entire LDOS002 European Phase I/II clinical study in Poland through to completion. Given the Company's limited current cash resources and the possibility of not

being able to obtain additional financing on a timely basis, the Company may be required to reduce, delay or cancel one or more of its planned research and development programs, including clinical trials along with further reductions in overhead, any of which could impair the current and future value of the business.

Phase I/II clinical study (“LDOS003”)

A potential secondary yet unproven aspect of L-DOS47 action is the observation that an acidic pH microenvironment (< pH 6.8) may limit the effectiveness of weakly basic cytotoxic drugs employed in treatment of lung and other solid tumours. An acidic microenvironment is associated with protonation of these agents and decreased uptake and alkalisation can result in enhanced agent uptake and cytotoxicity. Furthermore, extracellular acidity may also inhibit the active transport of some drugs. This raises the possible application of L-DOS47 to combination cancer therapies with agents which have little or no overlapping toxicities.

LDOS003 is a Phase II, open-label, randomised study in male and female patients aged ≥ 18 years old with Stage IV non-squamous NSCLC. The staging of NSCLC will be conducted according to Tumour Node Metastases (TNM), 7th Edition. In Part 1 of the study (Dose Escalation), patients will receive multiple weekly doses of L-DOS47 (administered as an intravenous [IV] infusion) with vinorelbine/cisplatin combination therapy. In Part 2 of the study (Randomised Treatment), patients will be randomly assigned to receive L-DOS47 in combination with vinorelbine/cisplatin or vinorelbine/cisplatin alone. The Company is currently planning to run the study in Poland where the vinorelbine/cisplatin combination is still widely used as first-line in NSCLC. The company does not exclude the possibility of running the trial in other countries provided local health authorities approve of the study design.

Given the Company’s limited current cash resources and the possibility of not being able to obtain additional financing on a timely basis, the Company may be required to reduce, delay or cancel one or more of its planned research and development programs, including clinical trials along with further reductions in overhead, any of which could impair the current and future value of the business.

At the European Society of Medical Oncology (ESMO) 2016 Congress in Copenhagen, Denmark, preliminary results from the KEYNOTE-021 study, were presented which included patients with metastatic non-squamous NSCLC regardless of PD-L1 expression level. KEYTRUDA® (pembrolizumab) plus chemotherapy (carboplatin plus pemetrexed) achieved a 55 percent objective response rate (ORR) compared to 29 percent for chemotherapy alone, the standard of care, and reduced the risk of disease progression or death by 47 percent. To date, KEYTRUDA® is the only anti-PD-1 therapy to demonstrate superior efficacy in combination with chemotherapy compared to chemotherapy alone in patients receiving first-line treatment. This new data suggests that KEYTRUDA® in combination with pemetrexed and platinum may become the standard of care for previously untreated patients with metastatic non-squamous NSCLC regardless of PD-L1 expression. As a result, the Company has decided to place on hold the commencement of this clinical study and therefore prioritize the clinical studies that are currently ongoing.

Commercialization

The Company’s commercialization objective with DOS47 is to eventually enter into a strategic partnering alliance with a large pharmaceutical company, on an individual or multiple drug candidate basis, such as L-DOS47 or any potential new DOS47 drug product candidate. In the meantime, the Company’s objective is to continue generating value-adding clinical findings, which demonstrate the safety and efficacy of L-DOS47 in patients or any other new potential DOS47 drug candidate so as to maximize value for shareholders when entering into a strategic partnering alliance.

Market and Competition

Based on information published in “Cancer Facts and Figures 2016” by the American Cancer Society (www.cancer.org), lung cancer accounts for about 27% of all cancer deaths and is by far the leading cause of cancer death among men and women in the U.S. It is estimated that in 2015 there will be over 224,390 new lung cancer cases.

If detected early, surgical removal of the cancerous tissue is currently a patient’s best option. However, in the vast majority of cases, the cancer is not typically identified until it has advanced to a level at which surgical intervention is no longer an option. In the cases of inoperable, locally advanced, recurrent or metastatic NSCLC and with no known targetable mutations, treatment strategies consist of one or more of today’s leading chemotherapeutic drug regimens for lung cancer (e.g. platinum therapy together with certain leading chemotherapeutic drugs). Typically, these regimens relieve symptoms and, at best, delay progression of the disease.

Disease progression, even with targeted therapies, is highly likely to occur, and there are no clear guidelines and/or indications once such therapies fail. Maintenance therapy following the induction of first-line therapy is also a treatment strategy gaining support.

Immunotherapies such as immune checkpoint inhibitors that target Programmed Death 1 (“PD-1”) or its ligands, Programmed Death Ligand 1 or 2 (“PD-L1” and “PD-L2”) are showing significant clinical successes in NSCLC. On March 4, 2015 the FDA approved Nivolumab, the generic name for the trade drug named Opdivo®, which targets PD-1 for the treatment of metastatic squamous NSCLC with progression on or after platinum-based chemotherapy. More recently, on October 2, 2015, the FDA granted accelerated approval for Pembrolizumab, the generic name for the trade drug named Keytruda®, which targets PD-1 to treat patients with advanced metastatic NSCLC whose disease has progressed after other treatments and with tumours that express PD-L1. Anti-PD-L1 drugs such as MPDL3280A from Roche are also advancing rapidly through late stage clinical trials. The Company anticipates some of these approved drugs will eventually be approved as front line therapies for advanced stage NSCLC.

In 2015, three randomized Phase III trials found the immune checkpoint inhibitors nivolumab and pembrolizumab to have superior efficacy and less toxicity compared with second-line docetaxel chemotherapy in patients with NSCLC. For the first time, agents blocking a single pathway have shown significant benefit across multiple tumour types, with US Food and Drug Administration (FDA) approval in NSCLC, melanoma, and bladder and renal cell carcinoma. Now more than 1,000 immune checkpoint clinical trials are underway. Many possible treatment avenues are being explored with immune checkpoint inhibitors, including combinations with radiation, chemotherapy, targeted therapy, and other checkpoint inhibitors. Some studies are also investigating checkpoint inhibitors as front-line therapy.

These and other rapidly advancing immunotherapy treatments, currently in development, have the potential to significantly alter the treatment of cancer, not in just one cancer type but across many cancer types. As a result of these developments in immunotherapies, and in particular with the success of immunotherapies in the treatment of NSCLC, the Company is currently reassessing its L-DOS47 clinical program given that: (a) its target therapeutic indication, being inoperable, locally-advanced, recurrent or metastatic NSCLC, may be a good candidate to combine with the emerging best-in-class immunotherapies; and (b) leading therapeutics for such oncology applications have commonly been high revenue generators for the pharmaceutical sector.

Technological competition from pharmaceutical companies, biotechnology companies and university researchers is intense and is expected to continue to be very intense. Many competitors and potential competitors have substantially greater product development capabilities and financial, scientific, marketing and human resources than the Company, providing them with a competitive advantage over the Company.

The Biphasix™ Topical Formulation System

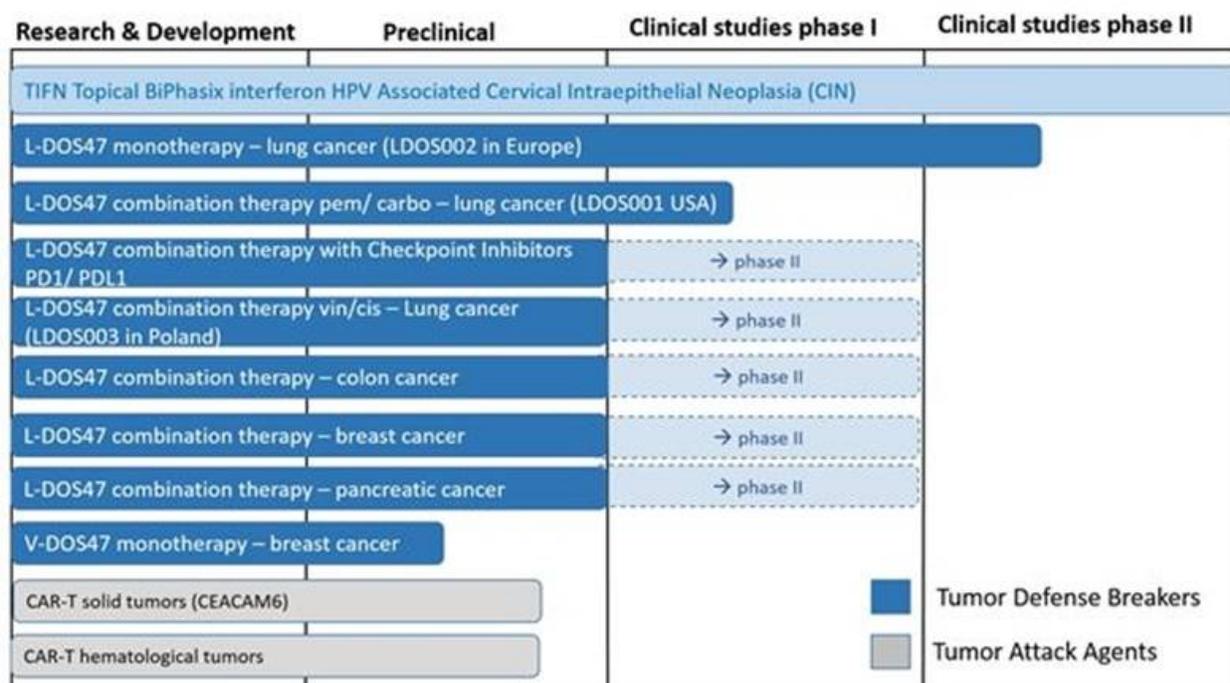
The Biphasix™ Topical Formulation System is a platform technology which the Company acquired and further developed for microencapsulating therapeutic compounds in multilayered, lipid-based microvesicles. These microvesicles have complex structures that include a variety of compartments into which drug molecules can be integrated. The principal application of the technology is in the preparation of topical dosage forms for the dermal (into the skin) or mucosal (into the mucosal tissues) delivery of large molecular weight drug compounds.

Topical Interferon Alpha-2b

The Company received investigational new drug (“IND”) approval by the FDA to conduct a U.S. Phase II/III clinical trial of Topical Interferon Alpha-2b in low-grade cervical dysplasia patients, as well as Clinical Trial Application (“CTA”) approval by the Bundesinstitut für Arzneimittel und Medizinprodukte and conditional CTA approval by the Medicines and Healthcare Regulatory Authority to conduct an identical European Phase III confirmatory trial in Germany and/or the United Kingdom, respectively.

Due to a lack of funding, a decision was made by the Company in fiscal 2012 to downsize and eventually close the Saskatoon laboratory which supported the Topical Interferon Alpha-2b drug development program, and focus any ongoing activities to sourcing and qualifying alternative interferon alpha-2b raw material samples, and finding suitable strategic partner(s) who would be willing to license or acquire the product and support the remaining development costs through to commercial launch. The Company has since ceased all activities related to Topical Interferon Alpha-2b, other than maintaining existing intellectual property associated with Topical Interferon Alpha-2b.

Product Pipeline



REVENUE GENERATING ACTIVITIES

Since the disposition of the Company's distribution business in Canada on January 25, 2013, the Company no longer has any revenue generating activities.

Royalty and in-licensing commitments

License Agreement with National Research Council

Helix announced on May 2, 2005 that it had begun to develop its lung cancer-specific drug compound L-DOS47. For this purpose, Helix entered into a worldwide exclusive license with the NRC, through which it obtained the right to combine an antibody that binds to NSCLC cells, and predominantly those of the adenocarcinoma type with minimal cross reactivity to other tissues with Helix's DOS47 technology. Unless earlier terminated pursuant to the license agreement, the license terminates when the last patent right related to the licensed technology expires, on a country-by-country basis. The Company is required to pay a royalty of 3% of net sales, with a minimum royalty of \$10,000 per year. The Company is also required to make certain milestone payments as follows: \$25,000 upon successful completion of Phase I clinical trials; \$50,000 upon successful completion of Phase IIb clinical trials; \$125,000 upon successful completion of Phase III clinical trials; and \$200,000 upon receipt of market approval by a regulatory authority. The license was subsequently amended to include an additional patent application which the Company is no longer pursuing. Patent applications in respect of the antibody originally licensed have been filed in Canada, the United States, and other countries. As announced on March 2, 2011, the NRC was issued a U.S. patent in respect of this antibody.

Amended Royalty Agreement with Dr. Foldvari

Certain of the Company's products are subject to the following royalty payments to Dr. Marianna Foldvari, a former director and officer of a former subsidiary of the Company:

- 2% of the Company's net sales revenue received from the marketing, manufacture, distribution or sale of certain products; or
- in the case of sub-license revenue, 2% of license fees or other revenue received by the Company related to the marketing, manufacture, distribution or sale of certain products which revenue is not allocated by the Company to the further development of the product.

Included in the products subject to the foregoing 2% royalty are PGE1, Alpha Interferon, Gamma Interferon, Acyclovir, Corticosteroids, Methotrexate, Minoxidil, Miconazole, and Tetracycline. Accordingly, any future revenue generated through the commercialization of Topical Interferon Alpha-2b will also be subject to this royalty. The royalty agreement expires on March 27, 2017.

Other Agreements

In addition to the foregoing, the Company also has payment commitments to the University of Saskatchewan Technologies Inc. in respect of the licensing or sale by the Company of any prospective products which utilize the Biphasix™ technology and contain prostaglandin E₁. The Company does not currently contemplate developing any such products.

PHARMACEUTICAL REGULATORY ENVIRONMENT

New drug development

Helix conducts drug development within a highly regulated environment. Regional and country-specific laws and regulations define the data required to show safety and efficacy of pharmaceutical products, and govern testing, approval, manufacturing, labeling and marketing of drugs. These regulatory requirements are a major factor in determining whether a marketable product is successfully developed and the amount of time and expense associated with each development process.

A pharmaceutical company launches a new prescription or non-prescription drug, whether innovative (original) or a generic version of a known drug, must demonstrate to the applicable regulatory authority, such as the FDA in the United States and Health Canada in Canada, that the drug is both effective and safe. The regulatory process for new drug approvals in the United States, Canada and Europe are among the most rigorous in the world, and many other jurisdictions follow a similar process. This regulatory process generally comprises the following stages described below.

In general, a potential new drug must first undergo pre-clinical testing in the laboratory (“*in vitro* studies”) and in animal models of the targeted disease or condition (“*in vivo* studies”) before being evaluated in humans (“clinical studies”). Pre-clinical studies primarily involve *in vitro* evaluations of the therapeutic activity of the drug and *in vivo* evaluations of the pharmacokinetic, metabolic and toxic effects of the drug in selected animal models.

Based on data generated during pre-clinical studies, extrapolations will be made to evaluate the potential risks versus the potential benefits of use of the drug candidate in humans under specific conditions of use. Upon successful completion of the pre-clinical studies, the drug candidate will undergo a series of evaluations in humans, including healthy volunteers and/or patients with the targeted disease or condition.

Before undertaking clinical studies, the pharmaceutical company sponsoring the new drug must submit to the Applicable Regulatory Authority an IND submission (in the United States), a CTA (in most European countries) or the equivalent in other jurisdictions. The application must contain specific, specified, information which generally includes the results of the pre-clinical tests completed up to the time of the application. Since the method of manufacture of a particular drug may affect the efficacy and safety of that drug, information on manufacturing methods and standards and the stability of the drug candidate and dosage form must also generally be presented.

The activities which are typically completed prior to obtaining approval for marketing and sale are typically as follows:

- Pre-clinical studies: Conducted using laboratory *in vitro* testing and testing in animal models of the targeted disease or condition to gain data on the efficacy and metabolism of the therapeutic as well as to identify potential safety issues.
- Filing of an IND, CTA or equivalent: The pre-clinical results are submitted to the Applicable Regulatory Authority for approval prior to testing in humans.
- Phase I Trials: Studies are conducted on a small number of human subjects to assess safety and the patterns of drug distribution and metabolism in the body. Normally, the initial human testing is conducted on healthy volunteers. In some cases, Phase I trials will also include patients having the targeted disease or condition: these trials are referred to as Phase I/II trials and may show efficacy results typically obtained in Phase II studies. Upon the completion of Phase I, and every phase thereafter, the drug sponsor must submit the results of such phase to, and obtain approval from, the Applicable Regulatory Authority before proceeding to the next phase of the clinical trial.

- Phase II Trials: Studies are conducted on groups of patients with the targeted disease or condition in order to develop efficacy, dosages and additional safety data. Typically, a Phase IIa trial uses escalating dose groups and a Phase IIb trial uses a specific dosage with a larger number of patients than a Phase IIa trial and adds a placebo arm to the trial.
- Phase III Trials: Large, multi-center, well-controlled studies are conducted on patients having the targeted disease or condition in order to provide statistically relevant proof of efficacy and safety of the therapeutic. Phase II/III trials refer to a combined trial where efficacy and safety are demonstrated.

Following Phase III, the drug sponsor submits a Marketing Authorization Application or equivalent to the Applicable Regulatory Authority for marketing approval. The application typically includes the results of the preclinical and clinical testing, together with manufacturing and controls information. The application is reviewed by the Applicable Regulatory Authority, and if approved, the drug is authorized for sale in the given country or jurisdiction.

Additional government regulation

In addition to the governmental approvals required in connection with the development of new drugs, governmental regulation in each applicable country or jurisdiction generally regulates research and laboratory procedures (including experimental testing on animals and disposal of potential or actual hazardous materials), clinical studies, manufacturing procedures, marketing, advertising and distribution methods, and industry sponsored scientific and educational activities, all of which significantly increases the level of difficulty and the costs involved in obtaining and maintaining the regulatory approval for marketing new and existing products.

Moreover, once the drug is approved for the market, the Applicable Regulatory Authority may impose restrictions on the marketing and sale of the product, including seizure or recall of the product and suspension or withdrawal of approval, if pre-marketing or post-marketing regulatory standards are not complied with or if there are problems with the product after it reaches the market. The Applicable Regulatory Authority may also require post-marketing studies to monitor the effect of an approved drug, and may impose restrictions on the marketing and sale of such drug based on the results of such studies.

INTELLECTUAL PROPERTY

Patents and other proprietary rights are very valuable to the Company, even though the patent positions of biotechnology companies may be uncertain and involve complex legal and factual issues. The Company has no assurance that any of its patent applications will result in the issuance of any patents. Even issued patents may not provide the Company with a competitive advantage against competitors with similar technologies, or who have designed around the Company's patents. Furthermore, the Company's patents may be struck down if challenged. Intellectual property laws do not protect intellectual property to the same extent from one country to another.

Because of the substantial length of time and expense associated with developing new products, the pharmaceutical, medical device, and biotechnology industries place considerable importance on obtaining patent protection for new technologies, products, and processes. The Company's policy is to file patent applications to protect inventions, technology, and improvements that are important to the development of our business and with respect to the application of our products and technologies to the treatment of a number of disease indications. The Company's policy also includes regular reviews related to the development of each technology and product in light of its intellectual property protection, with the goal of protecting all key research and developments by patent.

The Company seeks intellectual property protection in various jurisdictions around the world and owns patents and patent applications relating to products and technologies in the United States, Canada, Europe and other jurisdictions. The scope and duration of our intellectual property rights vary from country to country depending on the nature and extent of our intellectual property filings, the applicable statutory provisions governing the intellectual property, and the nature and extent of our legal rights. The Company will continue to seek intellectual property protection as appropriate and require our employees, consultants, outside scientific collaborators, and sponsored researchers to enter into confidentiality agreements with us that contain assignment of invention clauses outlining ownership of any intellectual property developed during the course of the individual's relationship with us.

Tumor Defense Breaker™

On September 29, 2016 the company filed a Canadian Trade Mark Application for "TUMOR DEFENSE BREAKER". It is planned to expand this trademark in all major markets and territories where will aim to market the products once they receive marketing approval by appropriate regulatory authorities. On September 30, 2016, the Canadian Intellectual Property Office acknowledged receipt of the application. The company will be advised when the application is

successful or rejected in at least 12 months' time. The company intends to use this trademark to market the novel technologies and assets it is developing to treat cancer.

DOS47

The Company currently owns two U.S. patents in respect of the DOS47 technology, and also has also licensed patent rights from the NRC for the antibody component of L-DOS47. With respect to non-U.S. patents, the Company owns 52 DOS47 related patents in other jurisdictions with a number of patent applications in countries around the world. The Company has recently filed a joint patent application in the U.S. with Amorfix to cover the antibody-DOS47 conjugates derived from their collaboration (see "New potential DOS47 Candidates" above). A new U.S. patent application to cover new features of the DOS47 technology was filed by the Company during fiscal 2013. During January 2014, an additional U.S. patent application covering specific L-DOS47 manufacturing and novel features was filed.

Cell Based Therapy

The company has recently filed a joint patent application with National Research Council of Cancer to protect the use of an antibody for use in cell based therapies. In addition, the company is in discussion with third parties to license additional intellectual properties to strengthen the company's portfolio.

Biphaxix™

The Company currently owns six U.S. Biphaxix™ patents.

FACILITIES

General office space

The Company's has recently relocated its head office from Aurora, Ontario, to 21. St. Clair Avenue East in Toronto, Ontario, Canada. The new lease arrangement expires August 31, 2019.

The Company leases a small office on a month to month basis in Saskatoon, Saskatchewan.

Laboratories

The Company also leases approximately 4,155 sq. ft. in Edmonton, Alberta, Canada under a lease arrangement that originally expired on June 30, 2014. The Company successfully amended the lease terms to expire December 2014 and has since renewed the lease to extend the terms to December 31, 2015. These premises house the Company's oncology research laboratory.

Manufacturing

The Company has no manufacturing capacity.

EMPLOYEES

The following table depicts the number of full-time equivalent employees as at July 31:

	2016	2015
Research and development	10.0	8.0
Operating, general and administration	4.5	4.5
	14.5	12.5

None of the Company's employees are covered by collective bargaining agreements.

RISK FACTORS

Helix is subject to risks, events and uncertainties, or "risk factors", associated with being both a publicly traded company operating in the biopharmaceutical industry, and as an enterprise with several projects in the research and development stage. As a result of these risk factors, reported information and forward-looking information may not necessarily be indicative of future operating results or of future financial position, and actual results may vary from the forward-looking information or reported information. The Company cannot predict all of the risk factors, nor can it assess the impact, if

any, of such risk factors on the Company's business or the extent to which any factor, or combination of factors, may cause future results or financial position to differ materially from either those reported or those projected in any forward-looking information. Accordingly, reported financial information and forward-looking information should not be relied upon as a prediction of future actual results. Some of the risks and uncertainties affecting the Company, its business, operations and results which could cause actual results to differ materially from those reported or from forward-looking information include, either wholly or in part, those described elsewhere in this AIF, as well as the following:

The Company does not have any source of operating income and is dependent solely on outside sources of financing

The Company's operations consist of research and development activities, which do not generate any revenue. Accordingly, the Company has no source of revenue, positive operating cash flow or operating earnings to subsidize its ongoing research and development and other operating activities. As a result, the Company will have to rely on cash on hand, and on outside sources of financing to fund its ongoing research and development and other operating activities. Such sources of financing involve risks, including that the Company will not be able to raise such financing on terms satisfactory to the Company or at all, and that any additional equity financing, if secured, would result in dilution to existing shareholders, and that such dilution may be significant.

The Company has a history of losses and expects to continue to incur additional losses for the foreseeable future

The Company's primary focus continues to be on its research and development of pharmaceutical product candidates. The research and development of pharmaceutical products requires the expenditure of significant amounts of cash over a relatively long time period. The Company expects to continue to incur losses from continuing operations, for the foreseeable future. The Company's cumulative deficit as at July 31, 2016 is \$145,531,000. There can be no assurance that the Company will record earnings in the future.

The Company requires additional funding

The Company's cash reserves will not be sufficient for the Company to fully fund its existing European Phase I/II clinical trial with L-DOS47 in Poland or its U.S. Phase I trial or any of the Company's other ongoing research and development, operating activities, working capital or capital expenditures for the next twelve months.

The Company has no sources of external liquidity, such as a bank loan or line of credit. The Company will therefore continue to rely on equity financing to fund its ongoing research and development activities and other expenses for the foreseeable future.

Equity financing has historically been the Company's primary source of funding; however, the market for equity financings for companies such as the Company is challenging. While the Company has been able to raise equity financing in recent years, there can be no assurance that additional funding by way of equity financing will continue to be available. Any additional equity financing, if secured, would result in dilution to the existing shareholders which may be significant. The Company may also seek additional funding from or through other sources, including grants, technology licensing, co-development collaborations, disposition of assets, mergers and acquisitions, joint ventures, and other strategic alliances, which, if obtained, may reduce the Company's interest in its projects or products or result in significant dilution to existing shareholders. There can be no assurance, however, that any alternative sources of funding will be available.

The failure of the Company to obtain additional financing on a timely basis may result in the Company reducing, delaying or cancelling one or more of its planned research and development, including any clinical trials, further reducing overhead, or monetizing non-core assets, any of which could impair the current and future value of the business or cause the Company to consider ceasing operations and undergoing liquidation.

Competition and technological change; Immunotherapies (cell based therapies)

The biotechnology and pharmaceutical industries are subject to rapid and substantial technological change. Technological competition from pharmaceutical companies, biotechnology companies and university researchers is intense and is expected to continue to be intense.

The rapid advancement of immunotherapies now has the potential to significantly change the treatment of cancer and may result in a reduction, which may be significant, in the potential patient population and/or treatment protocols available to chemotherapies and other treatments currently in development, such as the

Company's primary drug product candidate, L-DOS47. Furthermore developments in immunotherapies may require the Company to reposition its L-DOS47 drug product candidate from a front line monotherapy to a combination therapy with immunotherapies or other treatment protocols, and any such repositioning, would likely result in additional expenses being incurred by the Company and in delays in the anticipated development timeline for L-DOS47, or in the Company determining that its L-DOS47 drug product candidate is no longer viable.

The Company cell based therapies initiative may face significant hurdles. The Company's effort is mainly at research proof-of-concept stage. It is possible that the selected targets or choice of antibodies are not optimal. This can delay the initiation of formal preclinical and clinical development significantly. The Company has chosen to develop cell based therapy for solid tumour. While there are many successful examples of cell based therapy treatment in hematological malignancies, similar success in solid tumour is less certain.

The Company is conducting early stage research and development initiatives for products under development which may not be accepted by the market and may never generate revenue and the Company has limited sales, marketing and distribution experience

The Company is conducting early stage research and development initiatives and is currently in the process of developing new products that require further time consuming and costly research and development. It will be a number of years, if ever, before its products in development begin to generate revenues, if at all. There can be no assurance that any of the drug product candidates will ever be successfully developed or commercialized.

Even with regulatory approval, the Company may not achieve market acceptance, which depends on a number of factors, including the establishment and demonstration in the medical community of the clinical utility of the Company's products, and their potential advantage over alternative treatment methods. There is also the risk that the actual market size or opportunity for the Company's drug candidates is not certain. Failure to gain market acceptance of either of the Company's products currently under development or an incorrect estimate in the nature and size of their respective markets could have a material adverse effect on the Company.

The Company has limited sales, marketing and distribution experience, and there is no assurance that the Company will be able to establish adequate sales, marketing, and distribution capabilities or make arrangements with any collaborators, strategic partners, licensees, or others to perform such activities, or that such efforts will be successful. The Company's objective for its drug candidate products is to enter into strategic alliances with appropriate pharmaceutical partners. There can be no assurance that any such strategic alliance will be maintained or achieved, or if achieved, that it will result in revenue to the Company.

The timing of the Company's internal goals and projected timelines may not be met

The Company sets internal goals for and makes public statements regarding its expected timing of meeting the objectives material to its success, including the commencement, duration and completion of clinical trials and anticipated regulatory approvals. The actual timing of these forward-looking events can vary dramatically due to a number of factors, including, without limitation, delays in scaling-up of drug product candidates, delays or failures in clinical trials, additional data requirements from the regulators, the Company failing to obtain required financing, and other risks referred to herein. Without limiting the generality of the foregoing, it is possible that required regulatory approvals may be delayed or denied, including those related to undertaking or continuing clinical trials, manufacturing of drug products, and marketing such products.

The Company has expressed certain estimated timelines for its European Phase I/II clinical trials for L-DOS47 in Poland, the U.S. Phase I study. The timeline for the European Phase I/II trials and any future timelines are contingent on the Company having adequate financing to complete the trials and the assumption that the trials will be completed according to the current schedules. A failure to obtain necessary financing or a change in the schedule of the trials (which may occur if certain cost-deferral measures are taken, or due to factors beyond the Company's reasonable control, such as scheduling conflicts, the occurrence of serious adverse events, interruption of supplies of study drugs, withdrawals of regulatory approvals, or slow patient recruitment) could delay their commencement or completion, or result in their suspension or early termination, which could have a material adverse effect on the Company.

Intellectual property risks, including the loss of patent protection, the potential termination of licences, the inability to protect proprietary property, and possible claims of infringement against the Company or against a third-party from whom the Company licenses intellectual property

The Company's success depends, in part, on its ability to secure and protect its intellectual property rights and to operate without infringing on the proprietary rights of others or having third parties circumvent the rights owned or licensed by the Company. However, the Company cannot predict the enforceability of its patents or its ability to maintain trade secrets that may not be protected by patents. Patent risks include the fact that patent applications may not result in issued patents, issued patents may be circumvented, challenged, invalidated or insufficiently broad to protect the Company's products and technologies; blocking patents by third parties could prevent the Company from using its patented technology; it may be difficult to enforce patent rights, particularly in countries that do not have adequate legal enforcement mechanisms, and enforcing such rights may divert management attention and may cause the Company to incur significant expenses; and any expiry of an issued patent may negatively impact the underlying technology.

To protect its trade secrets, the Company enters into confidentiality undertakings with parties that have access to them, such as the Company's current and prospective distributors, collaborators, employees and consultants, but a party may breach the undertakings and disclose the Company's confidential information or competitors might learn of the information in some other way, which could have a material adverse effect on the Company.

The Company uses processes, technology, products, or information, the rights to certain of which are owned by others, such as a license from the NRC of the lung antibody used by the Company for L-DOS47. Termination or expiry of any licenses or rights during critical periods, and an inability to obtain them on commercially favourable terms or at all could have a material adverse effect on the Company and its drug candidates' development.

The Company operates in an industry that experiences substantial litigation involving the manufacture, use and sale of new products that are the subject of conflicting proprietary rights. The Company or one or more of its licensors may be subject to a claim of infringement of proprietary rights by a third party. It is possible that the Company's products and technologies do infringe the rights of third parties, and the Company or such licensor could incur significant expenses, and diversion of management attention, in defending allegations of infringement of proprietary rights, even if there is no infringement. Furthermore, the Company or such licensors may be required to modify its products or obtain licenses for intellectual property rights as a result of any alleged proprietary infringement. The inability to modify products or obtain licenses on commercially reasonable terms, in a timely manner or at all, could adversely affect the Company's business.

Research and development risks, including the need to prove the Company's drug candidates are safe and effective in clinical trials

The Company's drug candidates are complex compounds and the Company faces difficult challenges in connection with the manufacture of clinical batches of each of them, which could further delay or otherwise negatively affect the Company's planned clinical trials, or required regulatory approvals.

There is also the risk that the Company could obtain negative findings or factors that may become apparent during the course of research or development. The results from preclinical and clinical trials may not be predictive of results obtained in any ongoing or future clinical trials. A number of companies in the biotechnology and pharmaceutical industry have suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier trials and pre-clinical trials.

The timing and success of the Company's clinical trials also depend on a number of other factors, including, but not limited to: (a) obtaining additional financing, which is not assured; (b) sufficient patient enrolment, which may be affected by the incidence of the disease studied, the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the eligibility criteria for a patient to participate in the study and the rate of patient drop-out; (c) regulatory agency policies regarding requirements for approval of a drug, including granting permission to undertake proposed human testing; (d) the Company's capacity to produce sufficient quantities and qualities of clinical trial materials to meet the trial schedule; (e) performance by third parties, on whom the Company relies to carry out its clinical trials; and (f) the approval of protocols and/or protocol amendments.

Clinical trials are complex, expensive and uncertain, and have a high risk of failure, which can occur at any stage. Data obtained from pre-clinical and clinical trials may be interpreted in different ways, or be incorrectly

reported, which could delay or prevent further development of the drug candidate studied. Failure to complete clinical trials successfully and to obtain successful results on a timely basis could have a material adverse effect on the Company.

Even if the Company's drug candidates successfully complete the clinical trials and receive the regulatory approval necessary to market the drug candidates to the public, there is also the risk of unknown side effects, which may not appear until the drug candidates are on the market and may result in delay or denial of regulatory approval or withdrawal of previous approvals, product recalls or other adverse events, which could materially adversely affect the Company.

While the Company continues to explore opportunities to expand its drug product pipeline with new DOS47-based therapeutics pending the identification of further tumour targeting agents, there can be no assurance that any such tumour targeting agents will be identified or that any new DOS47-based therapeutics will be developed.

The Company is dependent on a number of third parties and the failure or delay in the performance of one of these third parties' obligations may adversely affect the Company

The Company is dependent on third parties to varying degrees in virtually all aspects of its business, including without limitation, on contract research organizations, contract manufacturing organizations, clinical trial consultants, raw material suppliers, collaborative research consultants, regulatory affairs advisers, medical and scientific advisors, clinical trial investigators, business service providers and other third parties. Critical supplies may not be available from third parties on acceptable terms, or at all, including GMP grade materials. Service providers may not perform, or continue to perform, as needed, or be available to provide the required services on acceptable terms or at all. Any lack of or interruption in supplies of raw materials or services, or any change in supply or service providers or any inability to secure new supply or service providers, would have an adverse impact on the development and commercialization of the Company's products. For example, the Company has previously experienced delays in the manufacturing of both engineering and clinical batches of L-DOS47, which have in turn caused delays in the progression of its development program, and there may be further delays. The Company relies on a third party for its supply of urease and if the contract with the third-party urease supplier is terminated early, the Company will have to find a new supplier of urease, as well as a new manufacturer of bulk drug product for future clinical testing programs. There can be no assurance that a new supplier or manufacturer can be contracted in a timely manner or at all, and this could negatively impact the Company's development plans for L-DOS47.

With respect to L-DOS47, the Company is currently dependent on, in addition to third party suppliers, manufacturers and consultants, the NRC and its license to the Company of a lung cancer antibody in order to develop and commercialize L-DOS47. Early termination of the license with NRC would have a material adverse effect on the further development of L-DOS47 and may require the cessation of such development, which would have a material adverse effect on the Company.

Given the Company's lack of financing, expertise, infrastructure and other resources to support a new drug product from clinical development to marketing, the Company also requires strategic partner support to develop and commercialize its drug candidates. There can be no assurance that such strategic partner support will be obtained upon acceptable terms or at all.

The Company relies heavily on contract manufacturers for the production of product required for its clinical trials, product formulation work, scaling-up experiments and commercial production. The Company may not be able to obtain new, or keep its current, contract manufacturers to provide these services. Even if the Company does, contract manufacturers may not be reliable in meeting its requirements for cost, quality, quantity or schedule, or the requirements of any regulatory agencies. The Company may not be able to manufacture products in quantities or qualities that would enable the Company to meet its business objectives, and failure to do so would materially adversely affect the Company's business.

If the Company can successfully develop markets for its products, the Company would have to arrange for their scaled-up manufacture. There can be no assurance that the Company will, on a timely basis, be able to make the transition from manufacturing clinical trial quantities to commercial production quantities successfully or be able to arrange for scaled-up commercial contract manufacturing. Any potential difficulties experienced by the Company in manufacturing scale-up, including recalls or safety alerts, could have a material adverse effect on the Company's business, financial condition, and results of operations.

The marketability of the Company's products may be affected by delays and the inability to obtain necessary approvals, and following any market approval, the Company's products will be subject to ongoing regulatory review and requirements which may continue to affect their marketability, including but not limited to regulatory review of drug pricing, healthcare reforms or the payment and reimbursement policies for drugs by the various insurers and other payors in the industry

The research, development, manufacture and marketing of pharmaceutical products are subject to regulation by the FDA, and comparable regulatory authorities in other countries. These agencies and others regulate the testing, manufacture, safety and promotion of the Company's products. The Company must receive applicable regulatory approval of a product candidate before it can be commercialized in any particular jurisdiction. Approval by a regulatory authority of one country does not ensure the approval by regulatory authorities of other countries. Changes in regulatory approval policies or regulations during the development period may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application, or may decide that our data are insufficient for approval, or require additional preclinical, clinical or other trials and place the Company's IND submissions on hold for an indeterminate amount of time. The development and regulatory approval process in each jurisdiction takes many years, requires the expenditure of substantial resources, is uncertain and subject to delays, and can adversely affect the successful development and commercialization of our drug candidates.

Even if the Company obtains marketing approval in a particular jurisdiction, there may be limits on the approval and the Company's products likely will be subject to ongoing regulatory review and regulatory requirements in that jurisdiction. Pharmaceutical companies are subject to various government regulations, including without limitation, requirements regarding occupational safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other present and future regulations.

The availability of reimbursement by governmental and other third-party payors, such as private insurance plans, will affect the market for any pharmaceutical product, and such payors tend to continually attempt to contain or reduce the costs of healthcare. Significant uncertainty exists with respect to the reimbursement status of newly approved healthcare products.

The Company operates in an industry that is more susceptible than others to legal proceedings and, in particular, liability claims

The Company operates in an industry that is more susceptible to legal proceedings than firms in other industries, due to the uncertainty involved in the development of pharmaceuticals. Defense and prosecution of legal claims can be expensive and time consuming, and may adversely affect the Company regardless of the outcome due to the diversion of financial, management and other resources away from the Company's primary operations. Negative judgments against the Company, even if the Company is planning to appeal such a decision, or even a settlement in a case, could negatively affect the cash reserves of the Company, and could have a material negative effect on the development of its drug products.

The Company may be exposed, in particular, to liability claims which are uninsured or not sufficiently insured, and any claims may adversely affect the Company's ability to obtain insurance in the future or result in negative publicity regarding the efficacy of its drug products. Such liability insurance is expensive, its ability is limited and it may not be available on terms that are acceptable to the Company, if at all.

The use of any of the Company's unapproved products under development, the use of its products in clinical trials, and, if regulatory approval is received, the sale of such products, may expose the Company to liability claims which could materially adversely affect the Company's business. The Company may not be able to maintain or obtain commercially reasonable liability insurance for future products, and any claims under any insurance policies may adversely affect its ability to maintain existing policies or to obtain new insurance on existing or future products. Even with adequate insurance coverage, publicity associated with any such claim could adversely affect public opinion regarding the safety or efficacy of the Company's products. As a result, any product liability claim or recall, including in connection with products previously sold by the Company through its former distribution business, could materially adversely affect the Company's business.

The Company is dependent upon key personnel; Director residency requirements

The Company's ability to continue its development of potential products depends on its ability to attract and maintain qualified key individuals to serve in management and on the Board. However, the Company does not currently have a formal succession plan for members of its senior management team or for its Board and,

because competition for qualified key individuals with experience relevant to the industry in which the Company operates is intense, the Company may not be able to attract and/or retain such personnel. Additionally, applicable corporate law requires that at least 25% of the Company's directors be resident Canadians, and the Company's articles provide that the Company cannot have fewer than five directors at any time.

Consequently, if the Company is unable to attract and/or loses and is unable to replace key personnel, its business could be negatively affected and, in particular, if the Company loses one or more of its three current resident Canadian directors in the future and is unable to find a sufficient number of resident Canadian directors to fill the resulting vacancy(ies), the Board will be prevented from taking any action other than appointing additional resident Canadian directors until such time as a sufficient number of new resident Canadian directors have been appointed such that at least 25% of the Company's directors are resident Canadians.

In addition, the Company does not carry key-man insurance on any individuals.

Indemnification obligations to directors and officers of the Company may adversely affect the Company's finances

The Company has entered into agreements pursuant to which the Company has agreed to indemnify its directors and senior management in respect of certain claims made against them while acting in their capacity as such. If the Company is called upon to perform its indemnity obligations, its finances may be adversely affected.

The Company's finances may fluctuate based on foreign currency exchange rates

The Company operates internationally and is exposed to foreign exchange risks from various currencies, primarily the U.S. dollar and the Euro.

Dilution through exercise of stock options, warrants and future equity financings

To attract and retain key personnel, the Company has granted options to its key employees, directors and consultants to purchase common shares and share awards as non-cash incentives. In addition, the Company has a significant number of warrants to purchase common shares outstanding. The issuance of shares pursuant to share awards and the exercise of a significant number of such options and warrants may result in significant dilution of other shareholders of the Company.

As noted above, the Company needs additional funding and has historically turned to the equity markets to raise this funding. The future sale of equity and warrants may also result in significant dilution to the shareholders of the Company.

Volatility of share price and trading volumes

The price of the Company's shares, as well as market prices for securities of biopharmaceutical and drug delivery companies generally, have historically been highly volatile, and have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Sales of substantial numbers of the Company's common shares could cause a decline in the market price of such common shares. There are minimum listing requirements for an issuer to maintain its listing on the Toronto Stock Exchange ("TSX"), and if the Company fails to maintain these listing requirements, it may be involuntarily delisted from the TSX. De-listing the Company or the Company shares from any securities exchange could have a negative effect on the liquidity of the Company shares and/or the ability of a shareholder to trade in shares of the Company, and could have an adverse effect on the Company's ability to raise future equity financings. The Company's common shares trade in a very low volume compared to the number of common shares outstanding. This means a shareholder could have difficulty disposing of common shares, especially if there are other shareholders of the Company trying to sell their shares in the Company at the same time. Volatility in share price and trading volumes could have an adverse effect on the Company's ability to raise future equity financings.

Trading in the Company's shares outside of Canada may be subject to restrictions on trading under foreign securities laws, and purchasers of securities under private placements by the Company will be subject to certain restrictions on trading

The Company's shares trade on the TSX and are freely tradeable only in Canada. As such, shareholders trading the Company's shares outside of Canada may be subject to restrictions imposed by foreign securities laws that may restrict their ability to transfer shares freely or at all. Certain securities offered by the Company pursuant to its private placements, including the unlisted warrants issued by the Company, are subject to certain initial hold periods and other restrictions on trading imposed by applicable securities laws and, in the case of the warrants, pursuant to the terms of the applicable warrant certificates. These restrictions may affect the liquidity of the investment of certain shareholders in the securities of the Company.

General economic conditions may have an adverse effect on the Company and its business

Continuing global economic volatility and uncertainty may have an adverse effect on the Company and its business, including without limitation the ability to raise additional financing, to obtain strategic partner support or commercialization opportunities and alliances for the Company's new drug candidates, and to obtain continued services and supplies.

The Company's business involves environmental risks that could result in accidental contamination, injury, and significant capital expenditures in order to comply with environmental laws and regulations

The Company and its commercial collaborators are subject to laws and regulations governing the use, manufacture, storage, handling and disposal of materials and certain waste products. Although the Company believes that its safety procedures comply with the regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed the resources of the Company. The Company is not specifically insured with respect to this liability. The Company (or its collaborators) may be required to incur significant costs to comply with environmental laws and regulations in the future; and the operations, business or assets of the Company may be materially adversely affected by current or future environmental laws or regulations.

DIVIDEND POLICY

To date, the Company has not paid any dividends on the outstanding common shares and has no current intention to declare dividends on its common shares in the foreseeable future. Any decision to pay dividends on the common shares in the future will be dependent upon the financial requirements of the Company to finance future growth, the financial condition of the Company and other factors that the Board may consider appropriate in the circumstances. The Company has no restrictions on the payment of dividends other than those provided under the provisions of the CBCA and the policies of the TSX.

CAPITAL STRUCTURE

Share capitalization

The Company's Articles of Continuance authorize the issuance of an unlimited number of common shares and 10,000,000 preferred shares issuable in series. As at July 31, 2016, 89,247,937 common shares and nil preferred shares were issued and outstanding.

Common shares

The holders of the common shares of the Company are entitled to receive notice of and to attend all meetings of the shareholders of the Company and have one vote for each common share held at all meetings of shareholders.

Subject to the rights, privileges, restrictions and conditions attaching to any other class or series of shares of the Company, the holders of common shares are entitled to receive dividends as and when declared by the Board, in such amount and in such form as the Board may from time to time determine, and subject to the limitations on declaration of dividends prescribed in the CBCA. All dividends which the Board may declare on the common shares must be declared and paid in equal amounts per share on all common shares at the time outstanding.

In the event of the dissolution, liquidation or winding-up of the Company, whether voluntary or involuntary, or in the event of any other distribution of the Company's assets among its shareholders for the purpose of winding-up its affairs, the holders of the common shares shall, subject to the rights of the holders of any other class of shares of the Company, be entitled to receive such assets of the Company upon such distribution.

Preferred shares

The preferred shares of the Company may at any time or from time to time be issued in one or more series. The directors may alter by resolution the Articles of the Company, to fix or change the number of shares in, and to determine the designation, rights, privileges, restrictions and conditions attaching to the shares of each series of preferred shares. The directors may also confer on the holders of any series of preferred shares the right to notice of or to be present or to vote, at any general meeting of the shareholders of the Company. Preferred shares shall be entitled to preference over the common shares and any other shares of the Company ranking junior to the preferred shares in the event of any liquidation, dissolution or winding-up of the Company or any distribution of its assets for the purpose of winding-up its affairs, whether voluntary or involuntary. The preferred shares of each series will rank in parity with the preferred shares of every other series with respect to priority in the payment of dividends and in the distribution of assets in the event of liquidation, dissolution or winding-up of the Company.

Warrants

Warrants have been issued by the Company in connection with the sale of units, with each unit consisting of one common share and one common share purchase warrant (each, a "Warrant"). The Warrants are subject to certain restrictions on transfer as set out in the applicable warrant certificates. The Warrant certificates provide that any rights under such certificates, including any beneficial interest therein, are not transferrable or assignable to any other person by the holder of such certificate without the prior written consent of the Company.

As of July 31, 2016, there were warrants outstanding to purchase an aggregate of 21,684,050 common shares at exercise prices ranging from \$1.54 per share to \$3.35 per share (subject to adjustment in the event of a subdivision, consolidation or reclassification of the common shares prior to the expiry time for such warrants). The warrants expire at various times between October 31, 2018 and July 28, 2021. Warrants issued by the Company since the beginning of the Company's most recently completed fiscal year are set out below.

On April 11, 2016, the Company completed a private placement, issuing 3,105,000 units at \$1.50 per unit, for gross proceeds of \$4,658,000. Each unit consists of one common share and one common share purchase warrant. Each common share purchase warrant entitles the holder to purchase one common share at a price of \$1.98 until April 10, 2021.

On July 29, 2016, the Company completed a private placement, issuing 1,250,000 units at \$1.46 per unit, for gross proceeds of \$1,825,000. Each unit consists of one common share and one common share purchase warrant. Each common share purchase warrant entitles the holder to purchase one common share at a price of \$1.82 until July 28, 2021.

On August 18, 2016, the Company completed a private placement, issuing 644,675 units at \$1.54 per unit, for gross proceeds of \$993,000. Each unit consists of one common share and one common share purchase warrant. Each common share purchase warrant entitles the holder to purchase one common share at a price of \$1.92 until August 17, 2021.

MARKET FOR SECURITIES

Trading Price and Volume

The Company's common shares began trading on the TSX on June 3, 1996. The current stock symbol is "HBP". The following table sets forth the price ranges and trading volumes of the Company's common shares on the TSX for the respective period.

2015	High	Low	Volume
August	\$2.13	\$1.92	374,125
September	\$2.25	\$2.00	232,812
October	\$2.20	\$1.91	330,058
November	\$2.19	\$1.99	458,896
December	\$2.10	\$1.81	965,471
2016	High	Low	Volume
January	\$2.00	\$1.82	464,955
February	\$1.96	\$1.70	83,257
March	\$1.94	\$1.80	520,408
April	\$2.00	\$1.86	464,001
May	\$2.07	\$1.85	411,776
June	\$2.00	\$1.61	386,678
July	\$2.25	\$1.85	165,732
August	\$2.00	\$1.80	32,628
September	\$1.90	\$1.65	104,314
October 1-28	\$1.79	\$1.51	55,265

The Company's common shares are quoted on the Frankfurt, Stuttgart, Munich and Berlin Stock Exchanges, under the trading symbol "HBP".

DIRECTORS AND OFFICERS

Name, Occupation and Securities Holding

The directors of the Company are elected at each annual general meeting of the Company and hold office until the next annual general meeting or until their successors are elected.

The following table represents the composition of the committees of the Company's Board of Directors.

Audit Committee	Governance & Compensation Committee	Science & Business Development Committee
Albert G. Beraldo ⁽¹⁾	Marek Orłowski ⁽¹⁾	Sven Rohmann ⁽¹⁾
Sławomir Majewski	Sławomir Majewski	Marek Orłowski
Marek Orłowski	Albert G. Beraldo	Sławomir Majewski

(1) Chairs of the individual committees

The following is a list of directors and executive officers of the Company, as of the date of this Annual Information Form, along with a brief biography:

- Sławomir Majewski
Director since October 2012 (lead independent director)
Residence: Warsaw, Poland

Prof. Majewski has been the Head of the Department of Dermatology and Venereology, Center of Diagnostics and Treatment of STD, Warsaw Medical University, Poland, since 1998, Deputy Rector for Science and International Relations at the Medical University of Warsaw since 2008, Coordinator of the Polish Center of Preclinical Studies and Technology since 2008 and a member of the scientific advisory board at the Polish Ministry of Health. Prof. Majewski is also a member of several national and international societies and scientific institutions including the

Polish Academy of Sciences, European Society of Dermatological Research, European Academy of Dermatology and Venereology, European Association for Cancer Research, American Association for Cancer Research, International Advisory Committee of the Archives of Dermatology and the International Editorial Committee of the Journal of American Academy of Dermatology. He was also member of the board of the European Society for Dermatological Research from 2000 to 2004 and from 2003 to 2008, Prof. Majewski was a member of the International Steering Committee of the FUTURE II Study on the quadrivalent HPV vaccine. He is also a former member of the Board, having served from 2008 to 2009.

- **Marek Orłowski**
Director since March 2012 (independent director)
Residence: Warsaw, Poland

Mr. Orłowski is currently a CEO of Adiuvo S.A., an investment holding company domiciled in Poland. Adiuvo invests in biomedicine and medical technologies. Mr. Orłowski previously acted as a consultant for Sanofi-Aventis for portfolio development and globalization of brands, a position he held since 2010. Mr. Orłowski is the co-founder of the Polish pharmaceutical company, Nepentes S.A., which was acquired by Sanofi-Aventis in 2010. Mr. Orłowski's experience at Nepentes S.A., from the time he co-founded it in 1991 until its acquisition in 2010, included extensive experience in all aspects of marketing, supervision of sales, creation of the company's portfolio and development strategy. His responsibilities included the supervision of strategy of product placement on the market and research and development, the sale of a number of significant brands, creation of new products, and involvement in clinical trials of products. He negotiated distribution contracts and coordinated product launches in Eastern Europe, from Russia through to Poland and Romania. He was also a member of the Management Board of Nepentes S.A. until 2010, where he was responsible for marketing, sales, portfolio creation, strategic development and research and development.

Mr. Orłowski also oversaw the listing of Nepentes S.A. on the Warsaw Stock Exchange and negotiated its subsequent acquisition by Sanofi-Aventis. Mr. Orłowski established and co-owned a direct marketing company, Pelargos Sp. z.o.o., as well as a pharmacy network company, Mexigem Polska Sp. z.o.o., both of which were later acquired. He is a board member and Chief Executive Officer of Airway Medix Sp. z.o.o., a Polish-Israeli company that produces ventilation assistance devices for intensive care units. He also is a board member and major shareholder in a Swedish nutraceutical company, Greenleaf Medical AB. Mr. Orłowski holds a MD (Medical Director) degree from the Medical Academy of Warsaw.

- **Dr. Sven Rohmann**
Director since December 2013 (non-independent director)
Residence: Zurich, Switzerland

Dr. Rohmann was appointed Chief Executive Officer of Helix on March 29, 2016, and he is also the Chair of the Board of Directors. He is an experienced life science manager and venture capitalist with 30 years hands-on experience in pre-clinical & clinical research as well as marketing, business & corporate development, especially in the field of oncology. Since April 2014, he acts as an independent advisor to various companies, including the oncology company Oryx GmbH. From July 2010 until April 2014, Dr. Rohmann served as General Manager, Europe with Burrill & Company, a global venture capital firm with \$1.5 billion under management, and during that same period he has served as Chief Medical Officer and Advisor to the President of Immudyne Inc. During the period from April 2007 to October 2008, Dr. Rohmann served as a Venture Fund Capital Fund Manager for Novartis Pharma AG, and for part of that time also served as Global Head of Partnering, General Medicine and Mature Products with Novartis. Prior to his service with Novartis, Dr. Rohmann served as General and Managing Partner of Nextech Venture AG from 2002 to April 2007. Before his career as venture capitalist, Dr. Rohmann spent 10 years with Merck Serono, where he served as the Global Head, Strategic Marketing, Oncology, and was involved in the licensing of Erbitux, an oncology blockbuster drug, from Imclone and he led the establishment of Merck Oncology. In addition, Dr. Rohmann was the founding CEO of Ganymed Pharmaceuticals AG, a German oncology start-up company. Mr. Rohmann obtained his medical degree, PhD and MBA from the Universities of Mainz, Germany, and Rotterdam, Netherlands, respectively.

- Sylwester Cacek
Director since March 2014 (independent director)
Residence: Zurich, Switzerland

Sylwester Cacek is currently President of Sfinks Polska SA, and was the founder of Dominet Capital Group, which includes a nationwide retail bank, Dominet Bank SA. As Chief Executive Officer of the group, Mr. Cacek created a nationwide financial institution with a wide range of products and services dedicated to individual clients and small and medium enterprises. In 2007, Dominet SA was successfully sold to Fortis Group. In his career, Mr. Cacek has served as a member of supervisory boards of companies including Dominet Bank SA, Impel SA, OrsNet Sp. z o.o., SportLive24 SA and KS Widzew Łódź SA. He is also a shareholder of the Polish professional football club RTS Widzew Łódź.

- Albert G. Beraldo
Director since January 2016 (independent director)
Residence: Toronto, Ontario, Canada

Mr. Beraldo has over 25 years' experience in varying roles within the pharmaceutical/biotechnology industry. He was a founder and President and Chief Executive Officer of Alveda Pharmaceuticals Inc., a leading supplier of pharmaceuticals to the Canadian health care market, from 2006 until November 2015. Alveda was acquired by Teligent, Inc. (formerly IGI Laboratories, Inc.) (NASDAQ: TLGT), a New Jersey-based specialty generic pharmaceutical company, in November 2015 for CAD\$47 million in cash. Mr. Beraldo formerly served as President and CEO of Bioniche Pharma Group Limited until 2006. He also previously served as a Director of the Company from 1984 to 2005. Mr. Beraldo worked in public accounting with Ernst and Whinney until he joined Vetrepharm Canada Inc. as Financial Controller in 1983. Mr. Beraldo obtained a Bachelor of Commerce degree from the University of Windsor and a Chartered Accountant designation from the Canadian Institute of Chartered Accountants.

- George Anders
Director since January 2016 (independent director)
Residence: Woodbridge, Ontario, Canada

Prof. George Anders is the President of Anders Consulting. Between 1975 and 2012 he was employed by Ontario Hydro and its successor companies in Toronto, Canada. He was a Principal Engineer/Scientist in the Electrical Systems Technologies Department of Kinectrics Inc. for many years. Dr. Anders is a Professor at the Faculty of Electrical and Electronic Engineering of the Technical University of Lodz in Poland and an Adjunct Professor in the Department of Electrical and Computer Engineering at the University of Toronto. Dr. Anders obtained a Ph.D. and a D.Sc. (Habilitation) in Electrical Engineering from the University of Toronto and the University of Lodz, respectively. He is a registered Professional Engineer in the Province of Ontario and a Fellow of the Institute of Electrical and Electronic Engineers. He is also a Project Management Professional registered with the Project Management Institute.

- Theodore J. Witek, Jr.
Director since August 2016 (independent director)
Residence: Toronto, Ontario, Canada

Dr. Witek brings over three decades of clinical development, medical affairs and commercial experience to Helix's board. Dr. Witek currently holds the position of Senior Vice President, Corporate Partnerships and Chief Scientific Officer of Innoviva Inc. Dr. Witek is also a Professor & Senior Fellow at the Institute of Health Policy, Management, & Evaluation at the Dalla Lana School of Public Health, University of Toronto. Previously, Dr. Witek served as President and Chief Executive Officer, Boehringer Ingelheim Canada Ltd. Joining Boehringer in 1992, Dr. Witek held a number of positions of increasing responsibility. In 2001, he moved to Germany to lead the operating team for Spiriva® where he also served as the Boehringer Ingelheim Co-chair of the Joint Operating Committee with Pfizer in their global alliance. During his tenure in Canada, Dr. Witek served on the Board of Directors at Innovative Medicines Canada (formerly Rx&D), Canada's National Association for Research-Based Pharmaceutical Companies, chairing its Health Technology Assessment Committee and Public Affairs Committee. He also served over ten years on the Drug/Device Discovery and Development Committee of the American Thoracic Society, serving as Chairman from 2010 to 2012. Dr. Witek holds a Doctor of Public Health degree from Columbia University, a Master of Public Health from Yale University, and a Master of Business Administration from Henley Management College.

- Heman Chao
Chief Scientific Officer
Residence: Aurora, Ontario, Canada

Heman Chao, Ph.D. has been Chief Scientific Officer of the Company since December 2008. He is a biochemist with expertise in proteomics technologies. Previously, he was President of Sensium Technologies Inc., a Company subsidiary, between November 2004 and April 2008, when it was amalgamated into the Company. Mr. Chao was previously Vice President of Technology and later Vice President of Research for the Company, between June 2002 to 2004. Between 1999 and June 2002, he was Manager of Sensium Technologies Inc. Prior to joining the Company, he was a research fellow in the federally funded Protein Engineering Network of Centres of Excellence coordinating multi-center research. Dr. Chao received his Ph.D in Biochemistry from Queen's University, Canada in 1994.

- Steve Demas
Chief Medical Officer
Residence: Toronto, Ontario, Canada

Mr. Demas was appointed Chief Medical Officer in April 2016. Previously, he was Director, Clinical Operations at the Company, responsible for the leadership and direction of all clinical research operations, since 2013. Mr. Demas began his career in the pharmaceutical industry in 1990 as a Clinical Research Associate and Study Manager with Biovail Research Corporation, Bayer Canada Incorporated, Endpoint Research and Astellas Pharma Canada. supporting global clinical development of investigational products across therapeutic areas in all phases of clinical research. Since 2002, as Clinical Operations Manager, Mr. Demas managed 20 regional Sanofi Synthelabo Clinical Research Associates and 10 regional Altana Pharma Canada Clinical Research Associates across Canada. He was awarded Employee of the Year by Sanofi Synthelabo in 2003. Since 2005, as Senior Project Director at Endpoint Research Limited, Mr. Demas managed five Study Managers and helped develop their Project Management Process aimed at providing small pharma biotechs the development support required for a successful CRO partnership. As Alliance Manager, he contributed to the development of the BioMS lead compound, dirucotide, by supporting the BioMS Eli Lilly alliance, and worked with the Lilly Alliance Team to ensure compliance with the agreed to governance in support of the Alliance Agreement. Mr. Demas is a graduate of University of Toronto with a 4 year Bachelors of Science degree majoring in Physiology.

- Patrick Frankham
Chief Operating Officer
Residence: Toronto, Ontario, Canada

Dr. Frankham was appointed Chief Operating Officer of the Company in April 2016. He has 21 years' experience in the pharmaceutical and services industries. He has founded several healthcare enterprises in pharmaceuticals & services. His professional experience includes public, private & multinational companies. He is a founder, investor and board member of several healthcare ventures: Pivot Pharmaceuticals Inc. (2014), Vansen Pharma Inc. (2011) and Venn Life Sciences, Plc (2006) and has developed and marketed products in several therapeutic areas including; anti-infectives, uro-gynecology, ophthalmology, dermatology, oncology / immuno-oncology, endocrinology and CNS. He has pre-clinical, clinical & regulatory experience in the Americas and EU. Dr. Frankham obtained his Ph.D. from the Faculty of Medicine, Université Laval, Canada, in Physiology and Molecular Endocrinology; M.Sc., in Physiology and Molecular Endocrinology, Université Laval, Canada; and Bachelor of Arts and Science (Hons.), Nipissing University, Canada. He has completed an M.B.A. from the University of Liverpool, United Kingdom. He has peer-reviewed publications and continues to collaborate in academic research.

- Photios (Frank) Michalargias
Chief Financial Officer
Residence: Richmond Hill, Ontario, Canada

Photios (Frank) Michalargias, CPA, CA, has been Chief Financial Officer of the Company since June 2005. He possesses over 20 years of senior management experience in both public and private industry; and is experienced in transition and growth management, strategic planning and the raising of debt and equity financing. From 2004 to mid-2005, he was Chief Financial Officer of AP Plasman Corporation, a tier one North American automotive parts supplier controlled by Schroder Ventures International. From 2002 through to mid-2004, he was Senior

Finance Director for CFM Corporation, a public company listed on the TSX. Mr. Michalargias' previous tenures include senior financial roles with Trailmobile Corporation, Huhtamaki Oyi and Unilever. He holds a Commerce and Economics degree from the University of Toronto and is a Chartered Professional Accountant, Chartered Accountant. Mr. Michalargias' business functions, as Chief Financial Officer, include financial administration; responsibility for accounting and financial statements; liaising with auditors, the financial community and shareholders; and coordination of expenses/tax activities of the Company.

To the best of the Company's knowledge, the number and percentage of issued common shares of the Company beneficially owned, directly or indirectly, by the Directors and Officers of the Company, as a group and individually, are as set out in the following table. The table excludes and stock options or warrants beneficially owned, directly or indirectly by the Directors and Officers of the Company, as a group and individually.

Designation of Class	Number of Shares Held	Percentage of Class ⁽¹⁾
Sylwester Cacek	6,997,200 ⁽²⁾	7.77%
Slawomir Majewski	1,705,700	1.90%
Marek Orłowski	1,710,000	1.09%
Sven Rohmann	0	0.00%
George Anders	0	0.00%
Albert G. Beraldo	0	0.00%
Theodore Witek, Jr.	0	0.00%
Heman Chao	0	0.00%
Steve Demas	0	0.00%
Patrick Frankham	0	0.00%
Photios (Frank) Michalargias	0	0.00%
Total Common Shares	10,412,900	11.57%

(1) Based on 90,009,279 common shares issued and outstanding as at the date hereof.

(2) Includes common shares beneficially owned by the spouse of Mr. Cacek.

Cease Trade Orders, Bankruptcies, Penalties and Sanctions

To the knowledge of the directors and officers of the Company:

- a) no director or officer of the Company is, as at the date of this AIF or has been, within the 10 years before the date of the AIF, a director or executive officer of any company (including the Company) that:
 - (i) while such person was acting in such capacity, was the subject of a cease trade or an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days (an "order"); or
 - (ii) was subject to an order that was issued after such person ceased to act in such capacity and which resulted from an event that occurred while such person was acting in such capacity; or
- b) no director or officer of the Company or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company is, at the date of this AIF or has been, within the 10 years before the date of the AIF, a director or executive officer of any company (including the Company) that:
 - (i) while such person was acting in such capacity or with a year of such person ceasing to act in such capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
 - (ii) has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold such person's assets.

To the knowledge of the directors and officers of the Company, no director or officer of the company: (a) has been subject to any penalties or sanctions imposed by a court relating to Canadian securities legislation or by a Canadian securities regulatory authority or has entered into a settlement agreement with a Canadian securities regulatory authority, or (b) has been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the Company's knowledge, none of its directors, executive officers, or other insiders, nor any associate or affiliate of any of them, has any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or will materially affect the company.

TRANSFER AGENT AND REGISTRAR

The Company's transfer agent and registrar for its common shares is:

Computershare Trust Company of Canada
100 University Avenue
Toronto, Ontario, Canada, M5J 2Y1

MATERIAL CONTRACTS

The following are the only material contracts outside the ordinary course of business entered into by the Company within the most recently completed financial year of the Company.

- 1) The Company's wholly owned subsidiary, Helix Polska Sp z.o.o, entered into an agreement with the PNCRD, whereby certain expenditures made commencing on March 1, 2016 are eligible for reimbursement with the final reimbursement submission to be made no later than September 30, 2021. Of the total project costs, the public subsidy portion represents PLN12,506,955 (~CAD4,089,941). Helix Polska Sp z.o.o is required to spend PLN4,437,459 (~CAD1,451,108) towards eligible project expenditures. In addition, there is an expected 2,850,000 of manufacturing and clinical trial documentation costs that are ineligible for co-financing by the ERDF. The public subsidy funds may be drawn in advance or on a reimbursement basis, with varying criteria and timelines on justification of claims being made by Helix Polska Sp z.o.o. against the PNCRD for funding of the V-DOS47 development program in Poland. The Agreement may be terminated by either party upon one month's written notice and must also state the grounds for which the Agreement is being terminated. In certain cases of termination, the Subsidiary may be obligated to return the received financial support in full within fourteen days of the day notice is served, with interest.
- 2) The Company entered into a license agreement with the Company's wholly owned subsidiary, Helix Polska Sp z.o.o which grants the Company's subsidiary, on a worldwide basis:
 - a) a non-exclusive right, license and privilege to use the Technology DOS47 and the Intellectual Property Rights, solely for the Purpose and in accordance with the terms and conditions of this Agreement; and
 - b) an exclusive right, license and privilege to use the Technology v-DOS47 solely for the Purpose and in accordance with the terms and conditions of the Agreement; and
 - c) an exclusive right, license and privilege to commercialize Technology v-DOS47, where commercialization shall be interpreted as activities associated with building a business model of Technology v-DOS47, development of the sales process and implementation of candidates for products resulting from Technology v-DOS47 on the market in order to create capital and generate profit through the transfer of results of vDOS47 on the conditions determined by market transactions.

In consideration of the rights and licenses granted to the Company's subsidiary, the subsidiary will pay, or cause to be paid, the Company, provided that any part of Technology v-DOS47 has been commercialized, the following royalties based on the annual aggregate Net Sales of all Products on a worldwide basis, which rate will increase in accordance with the following brackets as total aggregate Net Sales of such products increase over the course of a particular calendar year:

- a) zero percent (0%) for annual aggregate Net Sales up to and including US\$2,000,000;
- b) six percent (6%) for annual aggregate Net Sales from US\$2,000,000 up to and including US\$250,000,000;

- c) eight percent (8%) for annual aggregate Net Sales from US\$250,000,000 up to and including US\$500,000,000; and
- d) twelve percent (12%) for annual aggregate Net Sales above US\$500,000,000.

Other material contracts entered into prior to the Company's 2016 fiscal year which are still in effect are listed below:

- 1) The Company entered into a Financial and Investor Relations Agreement with ACM Alpha Consulting Management Est. ("ACM") dated May 1, 2012 (the "ACM Agreement") and this agreement remains in force, on a month-to-month basis as of the date of this AIF. The ACM Agreement provides that ACM will provide certain investor and financial advisory services to the Company and may be terminated by either party, effective at any time, after May 1, 2013, upon ninety days' written notice. The agreement includes the following provisions:
 - a) a 12.5% fee on the gross proceeds on any capital raised up to six months after the termination of this agreement from an ACM introduced investor with residency outside Canada and the USA;
 - b) a 12.5% fee on the value of a transaction up to twelve months after the termination of this agreement from an ACM introduced strategic partner, including but not limited to, any cash payments to the Company as an up-front payment, any co-development proceeds, any milestone payments and any royalties associated with the transaction;
 - c) a 12.5% fee on the gross proceeds of any capital raised up to twelve months after the termination of this agreement from an ACM introduced strategic partner; and
 - d) a monthly fee for investor relation services of CHF33,000 and reimbursement of certain expenses.
- 2) Technology License Agreement with the National Research Council of Canada dated April 28, 2005 and amendment dated December 2, 2009 (described under *Narrative Description of the Business*, above);
- 3) Clinical Supplies Manufacturing Agreement with BioVectra Inc. dated November 1, 2010. The Company relies on BioVectra for its supply of urease and the manufacturer of bulk drug product for future clinical testing programs.

Electronic copies of the contracts set out above may be accessed under the Company's profile on SEDAR at www.sedar.com.

INTERESTS OF EXPERTS

The Company's auditors for fiscal 2016 and 2015 were BDO Canada LLP, 60 Columbia Way, Markham, Ontario, Canada, L3R 0C9. BDO Canada LLP is independent of the Company in accordance with the applicable rules of professional conduct/code of ethics of The Chartered Professional Accountants of Ontario.

AUDIT COMMITTEE DISCLOSURE

Audit Committee Responsibilities

The Company's Audit Committee is responsible for reviewing the Company's financial reporting procedures and internal controls and for the retention and review of the performance of the Company's external auditors, together with reviewing the scope and results of the Company's audits and managing the professional services furnished by the independent auditors. The Audit Committee is also responsible for reviewing the annual and quarterly financial statements and accompanying Management's Discussion and Analysis prior to their approval by the full Board. The Audit Committee also reviews the Company's financial controls with the auditors of the Company on an annual basis.

The Company's independent auditor is accountable to the Board and to the Audit Committee. The Board, through the Audit Committee, has the ultimate responsibility for evaluating the performance of the independent auditor, and through the shareholders, to appoint, for replacing and compensating the independent auditor.

The Company's Audit Committee has a charter, a copy of which is attached as Schedule "A".

Composition and relevant education and experience

The Audit Committee is currently comprised of three members: Albert G. Beraldo, Marek Orłowski and Sławomir Majewski, all of whom are independent directors. Mr. Beraldo is Chair of the Audit Committee.

All members of the audit committee are financially literate, meaning they have the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. A brief description of the education and experience of each of the audit committee members is set under the heading "Directors and Officers", above.

Exemptions Relied Upon

None.

Pre-approval of non-audit services

It is the Company's policy that all audit and non-audit services performed by its external auditors will continue to be pre-approved by the Company's Audit Committee.

Auditor fees

The total fees billed for professional services by BDO Canada LLP for fiscal 2016 and 2015 are as follows:

Item	2016		2015	
	Amount	Percentage	Amount	Percentage
Audit-Fees	\$61,456	89%	\$47,500	93%
Audit-Related Fees	\$0	0%	\$0	0%
Tax Fee	\$0	0%	\$0	0%
All Other Fees	\$7,849	11%	\$3,325	7%
Total	\$69,305	100%	\$50,825	100%

ADDITIONAL INFORMATION

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, securities authorized for issuance under equity compensation plans, and interests of insiders in material transactions, if applicable, is contained in the Company's Management Proxy Circular for its most recent annual meeting of shareholders that involved the election of directors. Additional financial information is provided in the Company's comparative financial statements, together with the associated management discussion and analysis, for its most recently completed financial year.

Any request for any documents referred to above should be made to the Chief Financial Officer, attention: Frank Michalargias, 21. St. Clair Avenue East, Suite 1100, Toronto, Ontario, M4T 1L9, Canada or by fax to (416) 925-1551.

Additional information relating to the Company can be found under the Company's profile on SEDAR at www.sedar.com and the Company's website at www.helixbiopharma.com.

GLOSSARY

Adenocarcinoma: Cancer that originates in glandular tissue.

BioVectra: BioVectra Inc., a cGMP manufacturer of active pharmaceutical ingredients, advanced intermediates, specialty biochemicals, enzymes and biomolecules.

Biphasix™ technology: Helix's proprietary platform technology designed for dermal, mucosal, transdermal and transmucosal delivery of molecules.

Board: The board of directors of the Company.

BCBA: means the *Canada Business Corporations Act*.

cGMP: Is an acronym for Current Good Manufacturing Practices, a term that is recognized worldwide for the control and management of manufacturing and quality control testing of foods and pharmaceutical products.

Colposcopy: A medical diagnostic procedure to examine the epithelial cells of the cervix, vagina, and vulva, especially for early signs of cancer.

CTA: Clinical Trial Application.

Dermal: Pertaining to the region of skin to the epidermis, consisting of a dense bed of vascular connective tissue. Dermal administration refers to the delivery of substances or compounds into the dermal region.

Dysplasia: A term used in pathology to refer to an abnormal growth or development of cells, tissue or organs. Dysplasia is often an indicator of early stage neoplasia or the abnormal proliferation of cells.

Epithelial: Of, pertaining to, or characterized by the epithelium, which is tissue, consisting of one or more cellular layers separated by very little intercellular substance, that covers most internal and external surfaces of the body.

FDA: United States Food and Drug Administration. The regulatory agency that oversees the development, manufacture, sale and use of diagnostic and therapeutic medical products in the United States.

GMP: Good Manufacturing Practice.

Health Canada: The department of the federal government of Canada that is responsible for all health related matters in Canada on a national level.

Histological: Of, pertaining to, or characterized by histology, which is the branch of biology dealing with the study of tissues, cells and their structure, especially at the microscopic level.

HPV: Human Papilloma Virus. One of the most common sexually transmitted infections, causing cervical dysplasia and ano-genital warts as well as being linked to a variety of cancers.

IFRS: International Financial Reporting Standards issued by the International Accounting Standards Board, and as adopted by the Chartered Professional Accountants Canada.

Immunoconjugate: A molecular complex consisting of one or more antibodies linked to a second compound.

IND: Investigational New Drug.

Intraepithelial: Occurring in or among cells of the epithelium including the cells of the epithelial layer of the skin.

Lipid: Fats or fat-like substances characterized by being water-insoluble.

Low-grade cervical lesions: For the purposes of this AIF, this term refers to cervical abnormalities combining an LSIL finding on Pap smear and a CIN1 or CIN2 diagnosis on colposcopy.

LSIL: Low-grade Squamous Intraepithelial Lesions.

Neoplasia: A pathological process that results in the abnormal and often uncontrolled growth and proliferation of cells, and is usually associated with cancer.

NRC: National Research Council of Canada.

NSCLC: Non-small cell lung cancer.

Pharmacokinetic: The action of drugs in the body over a period of time, including the processes of absorption, distribution, localization in tissues, biotransformation (metabolism) and excretion.

Phase I clinical trials: Clinical trials used to assess the potential toxicity of a new drug, primarily involving healthy volunteers, under the regulations of the applicable jurisdiction.

Phase II clinical trials: Clinical trials used to assess the effectiveness and most effective dosage of a new drug under the regulations of the applicable jurisdiction.

Phase III clinical trials: Late stage clinical trials used to assess a drug for efficacy and safety at several independent sites in a large number of patients under the regulations of the applicable jurisdiction.

RECIST: Response Evaluation Criteria In Solid Tumors. A set of published rules that define when cancer patients improve, stay the same, or worsen during treatments.

Therapeutic: A medical treatment or curative product for a disease.

Topical Interferon Alpha-2b: A topical preparation under development by the Company that is intended to be self-applied to HPV-infected tissues, in order to deliver interferon-alpha intradermally. It is based on Helix's proprietary Biphaxis™ drug delivery technology.

TSX: The Toronto Stock Exchange.

Transdermal: Access to the systemic blood circulation via migratory passage through the multiple layers of skin.

Transmucosal: Access to the systemic blood circulation via migratory passage through the multiple layers of mucosa.

SCHEDULE A

HELIX BIOPHARMA CORP.

AUDIT COMMITTEE CHARTER

The Audit Committee of the Board of Directors (the “Board”) of Helix BioPharma Corp. (the “Corporation”) shall have the composition, responsibilities, powers, duties and authority specified in this Charter.

I. Purpose

The Audit Committee’s purpose is to:

- a. Assist the Board’s oversight of:
 - i. The integrity of the Corporation’s financial statements;
 - ii. The Corporation’s financial accounting and reporting, the system of internal controls established by management, and the adequacy of internal and independent auditing relative to these activities;
 - iii. The Corporation’s compliance with legal and regulatory requirements; and
 - iv. The qualifications, independence and performance of the independent public accounting firm auditing the Corporation’s financial statements.
- b. Prepare such reports as may be required from time to time by applicable securities laws and by the rules and regulations of applicable regulatory authorities (including any stock exchange on which the Corporation’s securities are listed) (such laws, rules and regulations being hereinafter referred to, collectively, as the “Rules and Regulations”).
- c. Oversee the work of the Corporation’s independent accounting firm, including the resolution of disagreements between management and the independent public accounting firm regarding financial reporting.

II. Composition, Appointment and Procedures.

- a. The Audit Committee shall consist of at least three members of the Board, each of whom shall be, subject to such exceptions as may be permitted by the Rules and Regulations, an “independent director” and “financially literate” within the meaning of the Rules and Regulations.
- b. No member of the Audit Committee may concurrently serve on the audit committee of more than two other public companies unless the Board determines that such simultaneous service would not impair the ability of such director to effectively serve on the Audit Committee.
- c. The members of the Audit Committee shall be appointed by the Board and shall continue to act until their successors are appointed. Members shall be subject to removal at any time by the Board.
- d. The Audit Committee shall meet at least four times each year. At such meetings, the Audit Committee shall discuss such audit matters as the Audit Committee deems appropriate with the Corporation’s CFO and independent public accounting firm.

- e. Periodically, the Audit Committee shall meet separately with the independent public accounting firm.

III. Duties and Responsibilities with Respect to Audit, Accounting and Financial Disclosure.

The Audit Committee shall:

- a. Prior to filing with the applicable regulatory authorities or otherwise publicly disclosing the information, review and discuss with the Corporation's management and independent public accounting firm:
 - i. the Corporation's annual audited financial statements, quarterly financial statements, and annual and quarterly financial press release, including the Corporation's disclosures under "Management's Discussion and Analysis"; and,
 - ii. the scope and results of the annual audit, or any interim reporting;
- b. Review and discuss with the Corporation's management and independent public accounting firm:
 - i. major issues regarding accounting principles and financial statement presentations, including any significant changes in the Corporation's selection or application of accounting principles, and major issues as to the adequacy of the Corporation's internal controls and any special audit steps adopted in light of material control deficiencies;
 - ii. analyses prepared by management and/or the independent public accounting firm setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effects of alternative IFRS methods on the financial statements;
 - iii. the effect of regulatory and accounting initiatives, as well as off-balance-sheet structures, on the Corporation's financial statements; and
 - iv. the type and presentation of information to be included in quarterly and annual financial press releases;
- c. Review with the Corporation's independent public accounting firm any audit problems or difficulties and management's response, including:
 - i. any restrictions on the scope of the activities of the independent public accounting firm;
 - ii. any restriction on the independent public accounting firm's access to requested materials;
 - iii. any significant disagreements with management; and
 - iv. any material audit differences that the independent public accounting firm noted or proposed but for which the Corporation's financial statements were not adjusted;
- d. Resolve any disagreements between the independent public accounting firm and Corporation's management regarding financial reporting;
- e. Discuss with the Corporation's management, independent public accounting firm and Chief Financial Officer the adequacy of the Corporation's internal accounting, financial and operating controls;

- f. Be satisfied that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements, and periodically assess the adequacy of such procedures; and
- g. Report to the Board with respect to the foregoing.

IV. Specific Responsibilities with Respect to the Corporation's Independent Public Accounting Firm

The Corporation's independent public accounting firm is ultimately accountable to the Board and shall report directly to the Audit Committee.

- a. The Audit Committee shall recommend to the Board of Directors:
 - i. The independent public accounting firm to be nominated for the purpose of preparing or issuing an auditor's report or performing other audit, review or attest services for the Corporation; and
 - ii. The compensation of the independent public accounting firm.
- b. The Audit Committee shall annually evaluate the qualifications, performance and independence of the independent public accounting firm and the lead partner.
- c. The Audit Committee shall pre-approve all non-audit services to be provided to the Corporation or its subsidiary entities by the Corporation's independent public accounting firm.
- d. The Audit Committee shall review and approve the compensation and terms of engagement of the Corporation's independent public accounting firm before the firm provides any audit, audit-related, tax or permitted non-audit services.
- e. At least annually, the Audit Committee shall obtain and review a report by the independent public accounting firm describing:
 - i. the firm's internal quality control procedures,
 - ii. any material issues raised by the firm's most recent internal quality control review or peer review; and
 - iii. all relationships between the firm and the Corporation.
- f. At least annually, the Audit Committee shall obtain from the independent public accounting firm assurance that they are not aware of any illegal act that has or may have occurred.
- g. The Audit Committee shall report to the Board with respect to the foregoing.

V. Additional Powers, Duties and Authority.

The Audit Committee shall have additional powers, duties and authority to:

- a. Monitor, review, and, if necessary or advisable, revise and update the Corporation's procedures for:
 - i. the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls and auditing matters; and

- ii. the confidential, anonymous submission by the Corporation's employees of concerns regarding accounting or auditing matters;
- b. Discuss with the Corporation's management the Corporation's guidelines and policies with respect to risk assessment and risk management, including the Corporation's major financial risk exposures and the steps management takes to monitor and control such exposures;
- c. Annually review the Audit Committee's performance and Charter, which shall include evaluating each member's qualifications, attendance, understanding of the Audit Committee's responsibilities and contribution to the functioning of the Audit Committee, and recommend any proposed changes to the Board for approval;
- d. Prepare such reports as are required by the Rules and Regulations;
- e. Review with the Corporation's legal counsel any legal matters that may have a material impact on the financial statements, the Corporation's Code of Business Conduct and Ethics and any material reports or inquiries received from regulators or governmental agencies;
- f. As the Audit Committee may deem appropriate, retain and terminate any legal, accounting or other consultants, who shall report directly to the Audit Committee, on such terms and conditions, including fees, as the Audit Committee in its sole discretion shall approve;
- g. Request that any of the Corporation's officers, employees, outside counsel or independent public accounting firm attend any meeting of the Audit Committee or meet with any of the Audit Committee's members or consultants;
- h. Review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the Corporation's present and former independent public accounting firm; and
- i. Report to the Board with respect to the foregoing.

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