Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-221093

The information in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 7, 2017

PRELIMINARY PROSPECTUS SUPPLEMENT
(To the Prospectus dated November 3, 2017)

Shares

FENNEC PHARMACEUTICALS INC.

Common Shares

We are offering of our common shares, no par value per share, pursuant to this prospectus supplement and the accompanying prospectus.

Our common shares are listed on the Nasdaq Capital Market under the symbol "FENC" and on the Toronto Stock Exchange under the symbol "FRX." On December 6, 2017, the last reported sale price of our common shares on the Nasdaq Capital Market was $8.90 per share.

Investing in our securities involves a high degree of risk. You should carefully review and consider the risks and uncertainties described under the heading "Risk Factors" beginning on page S-3 of this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to us	$	$

We have granted a 30-day option to the underwriters to purchase up to additional common shares solely to cover over-allotments, if any.

The underwriters expect to deliver the shares offered hereby against payment therefor on or about December , 2017.

Sole Book-Running Manager
Wedbush PacGrow

Co-Manager
H.C. Wainwright & Co.

December , 2017

TABLE OF CONTENTS

Prospectus Supplement

Prospectus

ABOUT THIS PROSPECTUS SUPPLEMENT

This document contains two parts. The first part is this prospectus supplement, which describes the terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated November 3, 2017, including the documents incorporated by reference therein, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the Securities and Exchange Commission (the "SEC") before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date (for example, a document incorporated by reference in the accompanying prospectus), the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free writing prospectus we have authorized for use in connection with this offering. We have not, and the underwriters have not, authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus and any free writing prospectus we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement entitled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference."

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreement, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants speak only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

All references in this prospectus supplement and the accompanying prospectus to "Fennec," the "Company," "we," "us," "our," or similar references refer to Fennec Pharmaceuticals Inc. and its subsidiaries, except where the context otherwise requires or as otherwise indicated.

We are offering to sell, and are seeking offers to buy, the shares only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the shares in certain jurisdictions or to certain persons within such jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about and observe any restrictions relating to the offering of the shares and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

NOTE ON FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents the Company has filed with the SEC that are incorporated by reference in this prospectus supplement or the accompanying prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements may concern possible or anticipated future results of operations or business developments. These statements are based on management's current expectations or predictions of future conditions, events or results based on various assumptions and management's estimates of trends and economic factors in the markets in which we are active, as well as our business plans. Words such as "expects", "anticipates", "intends", "plans", "believes", "seeks", "estimates", "projects", "forecasts", "may", "should", variations of such words and similar expressions are intended to identify such forward-looking statements. The forward-looking statements may include, without limitation, statements regarding product development, product potential, regulatory environment, sales and marketing strategies, capital resources, operating performance, or the closing of this offering. The forward-looking statements are subject to risks and uncertainties, which may cause results to differ materially from those set forth in the statements. Forward-looking statements should be evaluated together with the many uncertainties that affect the Company's business and its market, particularly those discussed under "Risk Factors" below, as well as any amendments to such risk factors reflected in our subsequent filings with the SEC. Forward-looking statements include, but are not limited to, statements about:

- our expectations regarding the use of our existing capital resources and any proceeds we may receive from the sale of securities offered under this prospectus supplement;
- our efforts to pursue collaborations with other companies and third parties;
- the timing and success of our planned preclinical studies with animals and clinical trials with humans;
- our ability to enroll patients in our clinical trials at the pace that we project;
- whether the results of our trials will be sufficient to support domestic or foreign regulatory approvals for our product candidate;
- our ability to obtain and maintain regulatory approval of our product candidate;
- the benefits of the use of our product candidate;
- our ability to successfully commercialize our product candidate if approved;
- the rate and degree of market acceptance of our product candidate;
- our ability to maintain, or recognize the anticipated benefits of, Orphan Drug Designation for our product candidate;
- our ability to protect our intellectual property;
- our corporate and development strategies;
- our expected results of operations;
- our anticipated levels of expenditures;
- the nature and scope of potential markets for our product candidate; and
- our ability to attract and retain key employees.

Forward-looking statements are not guarantees of future performance, and actual results may differ materially from those projected. The forward-looking statements are representative only as of the date they are made, and the Company assumes no responsibility to update any forward-looking statements except as required by law.

This prospectus supplement contains estimates, projections and other statistical data made by independent parties and by us relating to market size and growth, the incidence of certain medical conditions and other industry data. These data, to the extent they contain estimates or projections, involve a number of subjective assumptions and limitations, and you are cautioned not to give undue weight to such estimates or projections. Industry publications and other reports we have obtained from independent parties generally state that the data contained in these publications or other reports have been obtained in good faith or from sources considered to be reliable, but they do not guarantee the accuracy or completeness of such data. While we believe that the data from these industry publications and other reports are generally reliable, we have not independently verified the accuracy or completeness of such data. These and other factors could cause results to differ materially from those expressed in these publications and reports.

We may from time to time provide estimates of the potential United States and foreign market for our product candidate. These estimates are based on a number of factors, including our expectation as to the number of patients with a certain medical condition that would potentially benefit from our product candidate. While we have determined these estimates based on assumptions that we believe are reasonable, there are a number of factors that could cause our expectations to change or not be realized. See "Risk Factors." It is possible that the ultimate market for our product candidate will differ significantly from our expectations due to these or other factors and, therefore, investors should not place undue reliance on such estimates.

SUMMARY

This summary is not complete and does not contain all the information that you should consider before investing in our common shares. Before making an investment decision, you should carefully read the entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein, including the risk factors described in "Risk Factors" beginning on page S-3 of this prospectus supplement, as well as the financial statements and related notes and the other information incorporated by reference herein.

Company Overview

We are a biopharmaceutical company focused on the development of PEDMARK™ (a unique formulation of Sodium Thiosulfate ("STS")) for the prevention of platinum-induced ototoxicity in pediatric cancer patients.

We have not received and do not expect to have significant revenues from our product candidate until we are either able to sell our product candidate after obtaining applicable regulatory approvals or we establish collaborations that provide us with up-front payments, licensing fees, milestone payments, royalties or other revenue. We generated a net loss from operations of approximately $2.8 million for the twelve months ended December 31, 2016 (there was a non-cash gain on the change in derivative liability of $0.05 million), and net loss of $0.7 million for the twelve months ended December 31, 2015 (as a result of a non-cash gain on derivatives of $1.2 million). As of December 31, 2016, our accumulated deficit was approximately $114.3 million. Our independent outside accounting firm has indicated that these circumstances raise substantial doubt about our ability to continue as a going concern.

We incorporated under the Canada Business Corporations Act ("CBCA") in September 1996. Effective on August 25, 2011, we continued from the CBCA to the Business Corporations Act (British Columbia) (the "Continuance"). The Continuance was approved by our shareholders at our June 2011 Annual and Special Meeting and by resolution of our Board of Directors on August 10, 2011. We have three wholly-owned subsidiaries: Oxiquant, Inc. and Fennec Pharmaceuticals, Inc., both Delaware corporations, and Cadherin Biomedical Inc., a Canadian company. With the exception of Fennec Pharmaceuticals, Inc., all subsidiaries are inactive.

Our principal executive offices are located at PO BOX 13628, 68 TW Alexander Drive, Research Triangle Park, NC 27709. Our telephone number is (919) 636-4530. Our website is www.fennecpharma.com. Information contained in our website does not constitute part of this prospectus supplement.

THE OFFERING

Common shares offered by us	common shares.
Over-allotment option	We have granted the underwriters a 30-day option to purchase up to additional common shares from us at the public offering price, less the underwriting discount, to cover over-allotments, if any.
Common shares to be outstanding immediately after this offering	common shares (common shares if the underwriters' over-allotment option is exercised in full).
Use of Proceeds	We intend to use the net proceeds of this offering for obtaining regulatory approvals, the potential launch of PEDMARK™, and working capital and general corporate purposes. Our management will retain broad discretion over the allocation of the net proceeds from the sale of the common shares. See "Use of Proceeds" on page S-14 of this prospectus supplement for more information.
Risk Factors	Before purchasing our common shares, you should carefully consider the risk factors described in "Risk Factors" beginning on page S-3 of this prospectus supplement.
Exchange Listing	Our common shares listed on the Nasdaq Capital Market under the symbol "FENC" and on the Toronto Stock Exchange under the symbol "FRX." On December 6, 2017, the last reported sale price of our common shares on the Nasdaq Capital Market was $8.90 per share.

The information set forth above is based on 15,922,753 common shares outstanding on December 6, 2017 and excludes as of that date the following:

- 2,315,194 common shares issuable upon the exercise of outstanding options having a weighted average exercise price of $2.34 per share;
- 1,362,498 common shares issuable upon the exercise of outstanding warrants having an exercise price of $1.56 per share; and
- 1,665,494 additional common shares reserved for future issuance under our Stock Option Plan.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise of the outstanding options or the warrants described above and no exercise by the underwriters of their over-allotment option.

RISK FACTORS

An investment in our common shares involves a high degree of risk. Before deciding whether to invest in our common shares, you should consider carefully the risk factors described below, in conjunction with this entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement. In particular, you should carefully consider and evaluate the risks and uncertainties described below. If any of these risks were to occur, our business, financial condition or results of operations would likely suffer. In that event, the value of our securities could decline, and you could lose part or all of your investment. The risks and uncertainties we describe are not the only ones facing us. Additional risks not presently known to us or that we currently deem immaterial may also impair our business, operations or prospects and could cause the trading price of our common shares to decline, resulting in a loss of all or part of your investment.

Our business involves a number of risks, some of which are beyond our control. The risks and uncertainties described below are not the only ones we face. Set forth below is a discussion of the risks and uncertainties that management believes to be material to Fennec.

Risks Related to Our Business

We have a history of significant losses and have had no revenues to date through the sale of our products. If we do not generate significant revenues, we will not achieve profitability.

To date, we have been engaged primarily in research and development activities. We have had no revenues through the sale of our products, and we do not expect to have significant revenues until we are able to either sell our product candidate after obtaining applicable regulatory approvals or we establish collaborations that provide us with up-front payments, licensing fees, milestone payments, royalties or other revenue. We have incurred significant operating losses every year since our inception on September 3, 1996. We reported a loss of approximately $2.8 million (including a non-cash gain on derivative liabilities of $0.05 million) in the twelve months ended December 31, 2016, and reported a net loss of approximately $0.7 million (which included a non-cash gain on derivative liabilities of $1.2 million) for the twelve months ended December 31, 2015. At December 31, 2016, we had an accumulated deficit of approximately $114.3 million. We anticipate incurring substantial additional losses due to the need to spend substantial amounts on activities required for regulatory approval of PEDMARK™, commercial launch preparation of PEDMARK™, anticipated research and development activities, and general and administrative expenses, among other factors. We have not commercially introduced any products. Our ability to attain profitability will depend upon our ability to fund and develop products that are safe, effective and commercially viable, to obtain regulatory approval for the manufacture and sale of our product candidate and to license or otherwise market our product candidate successfully. Any revenues generated from such product, assuming it is successfully developed, marketed and sold, may not be realized for a number of years. We may never achieve or sustain profitability on an ongoing basis.

PEDMARK™ is currently our only product candidate and there is no assurance that we will successfully develop PEDMARK™ into a commercially viable product.

Since our formation in September 1996, we have engaged in research and development programs. We have generated no revenue from product sales, do not have any products currently available for sale, and none are expected to be commercially available for sale until we have completed regulatory approval of PEDMARK™. PEDMARK™ is currently our only product candidate. There can be no assurance that the research we fund and manage will lead PEDMARK™ or any future product candidate to become a commercially viable product. We have completed enrollment of two Phase III studies for PEDMARK™. We anticipate a substantial regulatory review prior to the commercialization of PEDMARK™.

If we do not maintain current or enter into new collaborations with other companies, we might not successfully develop our product candidate or generate sufficient revenues to expand our business.

We currently rely on scientific and research and development collaboration arrangements with academic institutions and other third party collaborators, including an exclusive worldwide license from Oregon Health & Science University ("OHSU") for STS. We also rely on collaborators for testing STS, including SIOPEL and the Children's Oncology Group.

The agreements with OHSU are terminable by either party in the event of an uncured breach by the other party. We may also terminate our agreement with OHSU at any time upon prior written notice of specified durations to OHSU. Termination of any of our collaborative arrangements could materially adversely affect our business. For example, if we are unable to make the necessary payments under these agreements, the licensor might terminate the agreement, which might have a material adverse impact. In addition, our collaborators might not perform as agreed in the future.

Since we conduct a significant portion of our research and development through collaborations, our success may depend significantly on the performance of such collaborators, as well as any future collaborators. Collaborators might not commit sufficient resources to the research and development or commercialization of our product candidate. Economic or technological advantages of products being developed by others, among other factors, could lead our collaborators to pursue other product candidates or technologies in preference to those being developed in collaboration with us. The commercial potential of, development stage of and projected resources required to develop our drug candidate will affect our ability to maintain current collaborations or establish new collaborators. There is a risk of dispute with respect to ownership of technology developed under any collaboration. Our management of any collaboration will require significant time and effort as well as an effective allocation of resources. We may not be able to simultaneously manage a large number of collaborations.

Our product candidate is still in development. Due to the long, expensive and unpredictable drug development process, we might not ever successfully develop and commercialize our product candidate.

In order to achieve profitable operations, we, alone or in collaboration with others, must successfully fund, develop, manufacture, introduce and market our product candidate. The time necessary to achieve market success for any individual product is long and uncertain. Our product candidate and research programs are in clinical development and require significant, time-consuming and costly research, testing and regulatory clearances. In developing our product candidate, we are subject to risks of failure that are inherent in the development of therapeutic products based on innovative technologies. The results of preclinical and initial clinical trials are not necessarily predictive of future results. Our product candidate might not be economical to manufacture or market or might not achieve market acceptance. In addition, third parties might hold proprietary rights that preclude us from marketing our product candidates or others might market equivalent or superior products.

We may need to conduct additional human clinical trials to assess our product candidate. If these trials are delayed or are unsuccessful, our development costs will significantly increase and our business prospects may suffer.

Before obtaining regulatory approvals for the commercial sale of our product candidate, we must demonstrate, through preclinical studies with animals and clinical trials with humans, that our product candidate is safe and effective for use in each target indication. To date, we have performed only limited clinical trials. Much of our testing has been conducted on animals or on human cells in the laboratory, and the benefits of treatment seen in animals or on human cells in a laboratory setting may not ultimately be obtained in human clinical trials. As a result, we may need to perform significant additional research and development activities and conduct extensive preclinical and clinical testing prior to any application for commercial use. We may suffer significant setbacks in additional clinical trials, and the trials may demonstrate our product candidate to be unsafe or ineffective. We may also encounter problems in our clinical trials that will cause us to delay, suspend or terminate those clinical trials, which would increase our development costs and harm our financial results and commercial prospects. Identifying and qualifying patients to participate in clinical trials of our potential products is critically important to our success. The timing of our clinical trials depends on, among other things, the speed at which we can recruit patients to participate in testing our product candidate. We have experienced delays in some of our clinical trials and we may experience significant delays in the future. If patients are unwilling to participate in our trials because of competing clinical trials for similar patient populations, perceived risk or any other reason, the timeline for recruiting patients, conducting trials and obtaining regulatory approval of potential products will be delayed. Other factors that may result in significant delays include obtaining regulatory or ethics review board approvals for proposed trials, reaching agreement on acceptable terms with prospective clinical trial sites, and obtaining sufficient quantities of drugs for use in the clinical trials. Such delays could result in the termination of the clinical trials altogether.

Regulatory approval of our product candidate is time-consuming, expensive and uncertain, and could result in unexpectedly high expenses and delay our ability to sell our product.

Development, manufacture and marketing of our product is subject to extensive regulation by governmental authorities in the United States and other countries. This regulation could require us to incur significant unexpected expenses or delay or limit our ability to sell our product candidate. Our clinical studies might be delayed or halted, or additional studies might be required, for various reasons, including:

- lack of funding;
- ineffectiveness of the drug;
- patients experiencing severe side effects during treatment;
- qualified patients not enrolling in the studies at the rate expected;
- drug supplies not being sufficient to treat the patients in the studies; or
- our decision to modify the drug during testing.

If regulatory approval of our product is granted, it will be limited to those indications for which the product has been shown to be safe and effective, as demonstrated to the satisfaction of the FDA and foreign regulators through clinical studies. Furthermore, approval might entail ongoing requirements for post-marketing studies. Even if regulatory approval is obtained, labeling and promotional activities are subject to continual scrutiny by the FDA and state and foreign regulatory agencies and, in some circumstances, the Federal Trade Commission. FDA enforcement policy prohibits the marketing of approved products for unapproved, or off-label, uses. These regulations and the FDA's interpretation of them might impair our ability to effectively market our product.

We and our third-party manufacturers are also required to comply with the applicable current FDA Good Manufacturing Practices regulations, which include requirements relating to quality control and quality assurance, as well as the corresponding maintenance of records and documentation. Further, manufacturing facilities must be approved by the FDA before they can be used to manufacture our product, and they are subject to additional FDA inspection. If we fail to comply with any of the FDA's continuing regulations, we could be subject to reputational harm and sanctions, including:

- delays, warning letters and fines;
- product recalls or seizures and injunctions on sales;
- refusal of the FDA to review pending applications;
- total or partial suspension of production;
- withdrawals of previously approved marketing applications; and
- civil penalties and criminal prosecutions.

In addition, identification of side effects after a drug is on the market or the occurrence of manufacturing problems could cause subsequent withdrawal of approval, reformulation of the drug, additional testing or changes in labeling of the product.

We may be unable to effectively deploy the proceeds from our recent financings for the development of STS.

In June 2017 and May 2016, we closed private placements of our common shares for gross proceeds of $7.6 million and $5.0 million, respectively. Any inability on our part to manage effectively the deployment of the capital from those private placements and this offering could limit our ability to successfully develop STS.

If our licenses to proprietary technology owned by others are terminated or expire, we may suffer increased development costs and delays, and we may not be able to successfully develop our product candidate.

The development of our drug candidate and the manufacture and sale of any products that we develop will involve the use of processes, products and information, some of the rights to which are owned by others. STS is licensed under agreements with OHSU. Although we have obtained licenses or rights with regard to the use of certain processes, products and information, the licenses or rights could be terminated or expire during critical periods and we may not be able to obtain, on favorable terms or at all, licenses or other rights that may be required. Some of these licenses provide for limited periods of exclusivity that may be extended only with the consent of the licensor, which may not be granted.

If we are unable to adequately protect or maintain our patents and licenses related to our product candidate, or if we infringe upon the intellectual property rights of others, we may not be able to successfully develop and commercialize our product candidate.

The value of our technology will depend in part upon our ability, and those of our collaborators, to obtain patent protection or licenses to patents, maintain trade secret protection and operate without infringing on the rights of third parties. Although we have successfully pursued patent applications in the past, it is possible that:

- some or all of our pending patent applications, or those we have licensed, may not be allowed;
- proprietary products or processes that we develop in the future may not be patentable;
- any issued patents that we own or license may not provide us with any competitive advantages or may be successfully challenged by third parties; or
- the patents of others may have an adverse effect on our ability to do business.

It is not possible for us to be certain that we are the original and first creator of inventions encompassed by our pending patent applications or that we were the first to file patent applications for any such inventions. Further, any of our patents, once issued, may be declared by a court to be invalid or unenforceable.

STS is currently protected by methods of use patents that we exclusively licensed from OHSU that expire in Europe in 2021 and are currently pending in the United States. In addition, periods of marketing exclusivity for STS may also be possible in the United States under orphan drug status. We obtained Orphan Drug Designation in the United States for the use of STS in the prevention of platinum-induced ototoxicity in pediatric patients in 2004; if it is subsequently approved, will have seven and a half years of pediatric exclusivity in the United States from the approval date.

We may be required to obtain licenses under patents or other proprietary rights of third parties but the extent to which we may wish or need to do so is unknown. Any such licenses may not be available on terms acceptable to us or at all. If such licenses are obtained, it is likely they would be royalty bearing, which would reduce any future income. If licenses cannot be obtained on an economical basis, we could suffer delays in market introduction of planned products or their introduction could be prevented, in some cases after the expenditure of substantial funds. If we do not obtain such licenses, we would have to design around patents of third parties, potentially causing increased costs and delays in product development and introduction or precluding us from developing, manufacturing or selling our planned products, or our ability to develop, manufacture or sell products requiring such licenses could be foreclosed.

Litigation may also be necessary to enforce or defend patents issued or licensed to us or our collaborators or to determine the scope and validity of a third party's proprietary rights. We could incur substantial costs if litigation is required to defend ourselves in patent suits brought by third parties, if we participate in patent suits brought against or initiated by our collaborators, or if we initiate such suits. We might not prevail in any such action. An adverse outcome in litigation or an interference to determine priority or other proceeding in a court or patent office could subject us to significant liabilities, require disputed rights to be licensed from other parties or require us or our collaborators to cease using certain technology or products. Any of these events would likely have a material adverse effect on our business, financial condition and results of operations.

Much of our technological know-how that is not patentable may constitute trade secrets. Our confidentiality agreements might not provide for meaningful protection of our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure of information. In addition, others may independently develop or obtain similar technology and may be able to market competing products and obtain regulatory approval through a showing of equivalency to our product that has obtained regulatory approvals, without being required to undertake the same lengthy and expensive clinical studies that we would have already completed.

The vulnerability to off-label use or sale of our product candidate that are covered only by "method of use" patents may cause downward pricing pressure on the product candidate if they are ever commercialized and may make it more difficult for us to enter into collaboration or partnering arrangements for the development of this product candidate.

STS is currently only covered by "method of use" patents, which covers the use of certain compounds to treat specific conditions, and are not covered by "composition of matter" patents, which would cover the chemical composition of the compound. Method of use patents provide less protection than composition of matter patents because of the possibility of off-label competition if other companies develop or market the compound for other uses. If another company markets a drug that we expect to market under the protection of a method of use patent, physicians may prescribe the other company's drug for use in the indication for which we obtain approval and have a patent, even if the other company's drug is not approved for such an indication. Off-label use and sales could limit our sales and exert pricing pressure on any product we develop covered only by method of use patents. Also, it may be more difficult to find a collaborator to license or support the development of our product candidate that is only covered by method of use patents.

If our third party manufacturers breach or terminate their agreements with us, or if we are unable to secure arrangements with third party manufacturers on acceptable terms as needed in the future, we may suffer significant delays and additional costs.

We have no experience manufacturing products and do not currently have the resources to manufacture any products that we may develop. We currently have agreements with contract manufacturers for clinical supplies of STS, including drug substance providers and drug product suppliers, but they might not perform as agreed in the future or may terminate our agreements with them before the end of the required term. Significant additional time and expense would be required to effect a transition to a new contract manufacturer.

We plan to continue to rely on contract manufacturers for the foreseeable future to produce quantities of products and substances necessary for research and development, preclinical trials, human clinical trials and product commercialization, and to perform their obligations in a timely manner and in accordance with applicable government regulations. If we develop any product with commercial potential, we will need to develop the facilities to independently manufacture such product or products or secure arrangements with third parties to manufacture them. We may not be able to independently develop manufacturing capabilities or obtain favorable terms for the manufacture of our product. While we intend to contract for the commercial manufacture of our product candidate, we may not be able to identify and qualify contractors or obtain favorable contracting terms. We or our contract manufacturers may also fail to meet required manufacturing standards, which could result in delays or failures in product delivery, increased costs, injury or death to patients, product recalls or withdrawals and other problems that could significantly hurt our business. We intend to maintain a second source for back-up commercial manufacturing, wherever feasible. However, if a replacement to our future internal or contract manufacturers were required, the ability to establish second-sourcing or find a replacement manufacturer may be difficult due to the lead times generally required to manufacture drugs and the need for FDA compliance inspections and approvals of any replacement manufacturer, all of which factors could result in production delays and additional commercialization costs. Such lead times would vary based on the situation, but might be twelve months or longer.

We may lack the resources necessary to effectively market our product candidate, and we may need to rely on third parties over whom we have little or no control and who may not perform as expected.

We may not have the necessary resources to market our product candidate. If we develop any products with commercial potential, we will either have to develop a marketing capability, including a sales force, which is difficult and expensive to implement successfully, or attempt to enter into a collaboration, merger, joint venture, license or other arrangement with third parties to provide a substantial portion of the financial and other resources needed to market such products. We may not be able to do so on acceptable terms, if at all. If we rely extensively on third parties to market our products, the commercial success of such products may be largely outside of our control.

We conduct our business internationally and are subject to laws and regulations of several countries which may affect our ability to access regulatory agencies and may affect the enforceability and value of our licenses.

We have conducted clinical trials in the United States, Canada, Europe and the Pacific Rim and intend to, or may, conduct future clinical trials in these and other jurisdictions. There can be no assurance that any sovereign government will not establish laws or regulations that will be deleterious to our interests. There is no assurance that we, as a British Columbia corporation, will continue to have access to the regulatory agencies in any jurisdiction where we might want to conduct clinical trials or obtain regulatory approval, and we might not be able to enforce our license or patent rights in foreign jurisdictions. Foreign exchange controls may have a material adverse effect on our business and financial condition, since such controls may limit our ability to flow funds into or out of a particular country to meet obligations under licenses, clinical trial agreements or other collaborations.

Our cash invested in money market funds might be subject to loss.

Even though we believe we take a conservative approach to investing our funds, the nature of financial markets exposes us to investment risk, including the risks that the value and liquidity of our money market investments could deteriorate significantly and the issuers of the investments we hold could be subject to credit rating downgrades. While we have not experienced any loss or write down of our money market investments in the past, we cannot guarantee that such losses will not occur in future periods.

Risks Related to Our Industry

If we are unable to obtain applicable U.S. and/or foreign regulatory approvals, we will be unable to develop and commercialize our drug candidate.

The preclinical studies and clinical trials of our product candidate, as well as the manufacturing, labeling, sale and distribution, export or import, marketing, advertising and promotion of our product candidate, are subject to various regulatory frameworks in the United States, Canada and other countries. Any products that we develop must receive all relevant regulatory approvals and clearances before any marketing, sale or distribution. The regulatory process, which includes extensive preclinical studies and clinical testing to establish product safety and efficacy, can take many years and cost substantial amounts of money. As a result of the length of time, many challenges and costs are associated with the drug development process, and the historical rate of failures for drug candidates is extremely high. Changes in regulatory policy could also cause delays or affect regulatory approval. Any regulatory delays may increase our development costs and negatively impact our competitiveness and prospects. It is possible that we may not be able to obtain regulatory approval of our drug candidate or approvals may take longer and cost more to obtain than expected.

Regulatory approvals, if granted, may entail limitations on the uses for which any product we develop may be marketed, limiting the potential sales for any such products. The granting of product approvals can be withdrawn at any time, and manufacturers of approved products are subject to regular reviews, including for compliance with FDA Good Manufacturing Practices regulations. Failure to comply with any applicable regulatory requirement, which may change from time to time, can result in warning letters, fines, sanctions, penalties, recalling or seizing products, suspension of production, or even criminal prosecution.

Future sales of our product candidate may suffer if they fail to achieve market acceptance.

Even if our product candidate is successfully developed and achieves appropriate regulatory approval, it may not enjoy commercial acceptance or success. Our product candidate may compete with a number of new and traditional drugs and therapies developed by major pharmaceutical and biotechnology companies. Market acceptance is dependent on the product candidate demonstrating clinical efficacy and safety, as well as demonstrating advantages over alternative treatment methods. In addition, market acceptance is influenced by government reimbursement policies and the ability of third parties to pay for such products. Physicians, patients, or the medical community may not accept or utilize any products we may develop.

We face a strong competitive environment. Other companies may develop or commercialize more effective or cheaper products, which may reduce or eliminate the demand for our product candidate.

The biotechnology and pharmaceutical industry, and in particular the field of cancer therapeutics where we are focused, is very competitive. Many companies and research organizations are engaged in the research, development and testing of new cancer therapies or means of increasing the effectiveness of existing therapies, including, among many others, Amgen, AstraZeneca, Bayer, Bristol-Myers Squibb, Eli Lilly, Eisai, Merck KGaA, Novartis, Johnson & Johnson, Pfizer, Roche, Taiho and Sanofi-Aventis. Many of these companies have marketed drugs or are developing targeted cancer therapeutics, which depending upon the mechanism of action of such agents could be competitors.

Many of our existing or potential competitors have substantially greater financial, technical and human resources than we do and may be better equipped to develop, manufacture and market products. In addition, many of these competitors have extensive experience with preclinical testing and human clinical trials and in obtaining regulatory approvals. Also, some of the smaller companies that compete with us have formed collaborative relationships with large, established companies to support the research, development, clinical trials and commercialization of any products that they may develop. Academic institutions, government agencies and other public and private research organizations may also conduct research, seek patent protection and establish collaborative arrangements for research, clinical development and marketing of products similar to those we seek to develop. These companies and institutions compete with us in recruiting and retaining qualified scientific and management personnel as well as in acquiring technologies complementary to our projects.

We are likely to face competition in the areas of product efficacy and safety, ease of use and adaptability, as well as pricing, product acceptance, regulatory approvals and intellectual property. Competitors could develop more effective, safer and more affordable products than we do, and they may obtain patent protection or product commercialization before we do or even render our product candidate obsolete. The existence of competitive products, including products or treatments of which we are not aware, or products or treatments that may be developed in the future, may adversely affect the marketability of any product that we develop.

We may face product liability claims that could require us to defend costly lawsuits or incur substantial liabilities that could adversely impact our financial condition, receipt of regulatory approvals for our product candidate and our results of operation.

The use of our product candidate in clinical trials and for commercial applications, if any, may expose us to liability claims in the event that such product candidate causes injury or death or results in other adverse effects. These claims could be made by health care institutions, contract laboratories, and subjects participating in our clinical studies, patients or others using our product candidate. In addition to liability claims, certain serious adverse events could require interruption, delay and/or discontinuation of a clinical trial and potentially prevent further development of our product candidate. We carry clinical trial insurance but the coverage may not be sufficient to protect us from legal expenses and liabilities we might incur. Litigation is very expensive, even if we defend successfully against possible litigation. In addition, our existing coverage may not be adequate if we develop additional products, and future coverage may not be available in sufficient amounts or at reasonable cost. Further, it is possible that we may later reduce or terminate this coverage based on future availability of financial resources. Adverse liability claims may also harm our ability to obtain or maintain regulatory approvals.

We used hazardous materials and chemicals in our research and development, and our failure to comply with laws related to hazardous materials could materially harm us.

Our research and development processes involve the controlled use of hazardous materials, such as flammable organic solvents, corrosive acids and corrosive bases. Accordingly, we are subject to federal, state, local and foreign laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. The risk of accidental contamination or injury from these materials cannot be completely eliminated. We could be held liable for any damages that result and any such liability could exceed our resources and may not be covered by our general liability insurance. We currently do not carry insurance specifically for hazardous materials claims. We may be required to incur significant costs to comply with environmental laws and regulations, which may change from time to time. Our current practice is to outsource these activities.

Efforts to reduce product pricing and health care reimbursement and changes to government policies could negatively affect the commercialization of our product candidate.

If our product candidate achieves regulatory approval, we may be materially adversely affected by the continuing efforts of governmental and third-party payers to contain or reduce health care costs. For example, if we succeed in bringing one or more products to market, such products may not be considered cost-effective and the availability of consumer reimbursement may not exist or be sufficient to allow the sale of such products on a competitive basis. The constraints on pricing and availability of competitive products may further limit our pricing and reimbursement policies as well as adversely impact market acceptance and commercialization for the products.

In many markets, the pricing or profitability of healthcare products is subject to government control. In recent years, federal, state, provincial and local officials and legislators have proposed or are proposing a variety of price-based reforms to the healthcare systems in the United States, Canada and elsewhere. Some proposals include measures that would limit or eliminate payments from third-party payors to the consumer for certain medical procedures and treatments or allow government control of pharmaceutical pricing. The adoption of any such proposals or reforms could adversely affect the commercial viability of our product candidates.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the "ACA", was passed, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The expansion of insured among children under the ACA is not expected to be significant to the prospects for our product candidate since Medicaid was more available to children than the general population.

The provisions of the ACA of importance to the pharmaceutical and biotechnology industry are, among others, the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs agents and biologic agents, which is apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts to negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations, unless the drug is subject to discounts under the 340B drug discount program;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements under the federal Physician Payments Sunshine Act for drug manufacturers to report information related to payments and other transfers of value made to physicians and teaching hospitals as well as ownership or investment interests held by physicians and their immediate family members;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board, which, if and when impaneled, will have authority to recommend certain changes to the Medicare program that could result in reduced payments for prescription drugs; and
- establishment of a Center for Medicare and Medicaid Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Some states are also considering legislation that would control the prices of drugs, and state Medicaid programs are increasingly requesting manufacturers to pay supplemental rebates and requiring prior authorization by the state program for use of any drug for which supplemental rebates are not being paid. Managed care organizations continue to seek price discounts and, in some cases, to impose restrictions on the coverage of particular drugs. Government efforts to reduce Medicaid expenses may lead to increased use of managed care organizations by Medicaid programs. This may result in managed care organizations influencing prescription decisions for a larger segment of the population and a corresponding constraint on prices and reimbursement for our products.

Since its enactment, there have been judicial and Congressional challenges to numerous aspects of the ACA, and Congress and the executive branch are seeking to replace the ACA with new federal legislation. There may also be federal and state regulatory changes that impact the ACA or healthcare programs, insurance coverage or reimbursement generally. These efforts have increased uncertainty regarding the availability of healthcare programs, insurance coverage and reimbursement as a general matter as well as for our product candidate, and we cannot predict how these events will impact our business.

In addition, there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which have resulted in several recent Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, reduce the price of drugs under Medicare and reform government program reimbursement methodologies for products. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

Any significant changes in the healthcare system in the United States, Canada or abroad would likely have a substantial impact on the manner in which we conduct business and could have a material adverse effect on our ability to raise capital and the viability of product commercialization.

Risks Related to Owning Our Common Shares

We may be unable to maintain the listing of our common shares on the Nasdaq Capital Market or the TSX and that would make it more difficult for shareholders to dispose of our common shares.

Our common shares are currently listed on the Nasdaq Capital Market and the TSX. Both the Nasdaq Capital Market and the TSX have rules for continued listing, including minimum market capitalization and other requirements, that we might not meet in the future.

Delisting from the Nasdaq Capital Market or the TSX would make it more difficult for shareholders to dispose of our common shares and more difficult to obtain accurate quotations on our common shares. This could have an adverse effect on the price of our common shares. There can be no assurances that a market maker will make a market in our common shares on the OTCQB or any other stock quotation system after delisting. Furthermore, securities quoted over-the-counter generally have significantly less liquidity than securities traded on a national securities exchange, not only in the number of shares that can be bought and sold, but also through delays in the timing of transactions and lower market prices than might otherwise be obtained. As a result, shareholders might find it difficult to resell shares at prices quoted in the market or at all. Furthermore, because of the limited market and generally low volume of trading in our common shares, our common shares are more likely to be affected by broad market fluctuations, general market conditions, fluctuations in our operating results, changes in the market's perception of our business, and announcements made by us, our competitors or parties with whom we have business relationships. Our ability to issue additional securities for financing or other purposes, or to otherwise arrange for any financing we may need in the future, may also be materially and adversely affected by the limited market and low trading volume of our common shares.

The market price of our common shares is highly volatile and could cause the value of your investment to significantly decline.

Historically, the market price of our common shares has been highly volatile and the market for our common shares has from time to time experienced significant price and volume fluctuations, some of which are unrelated to our operating performance. From January 1, 2014 to December 6, 2017, the closing trading price of our common shares on the TSX fluctuated from a high of CAD$15.63 per share to a low of CAD$1.08 per share and on the Nasdaq Capital Market (and prior to the listing of our common shares on the Nasdaq in September 2017, the OTCQB) fluctuated from a high of $12.35 per share to a low of $0.29 per share. Historically, our common shares have had a low trading volume, and may continue to have a low trading volume in the future. This low volume may contribute to the volatility of the market price of our common shares. It is likely that the market price of our common shares will continue to fluctuate significantly in the future.

The market price of our common shares may be significantly affected by many factors, including without limitation:

- the development of our sole product candidate, STS;
- the need to raise additional capital and the terms of any transaction we are able to enter into;
- other external factors generally or stock market trends in the pharmaceutical or biotechnology industries specifically;
- announcements of licensing agreements, joint ventures, collaborations or other strategic alliances that involve our product or those of our competitors;
- innovations related to our or our competitors' products;
- actual or potential clinical trial results related to our or our competitors' products;
- our financial results or those of our competitors;
- reports of securities analysts regarding us or our competitors;
- developments or disputes concerning our licensed or owned patents or those of our competitors;
- developments with respect to the efficacy or safety of our product or those of our competitors; and
- health care reforms and reimbursement policy changes nationally and internationally.

Our existing principal shareholders hold a substantial number of our common shares and may be able to exercise influence in matters requiring approval of our shareholders.

At December 6, 2017, our current shareholders separately representing more than 5% ownership in our Company collectively represented beneficial ownership of approximately 65.4% of our common shares. In particular, as at December 6, 2017: Southpoint Capital Advisors LP ("Southpoint Capital") owned or exercised control over approximately 4.0 million common shares, or approximately 25.1% of our issued and outstanding common shares; Essetifin SpA owned approximately 2.9 million common shares, or approximately 18.4% of our issued and outstanding common shares; Manchester Explorer, LP ("Manchester Explorer"), together with its associates, owned approximately 2.5 million common shares, or approximately 15.5% of our issued and outstanding common shares; and 683 Capital Management, LLC ("683 Capital") owned approximately 0.9 million shares, or approximately 5.7% of our issued and outstanding common shares. Southpoint Capital, Essetifin SpA, Manchester Explorer, 683 Capital and other current and future significant shareholders, acting alone or together, might be able to influence the outcomes of matters that require the approval of our shareholders, including but not limited to certain equity transactions (such as a financing), an acquisition or merger with another company, a sale of substantially all of our assets, the election and removal of directors, or amendments to our incorporating documents. These shareholders might make decisions that are adverse to your interests. The concentration of ownership could have the effect of delaying, preventing or deterring a change of control of our Company, which could adversely affect the market price of our common shares or deprive our other shareholders of an opportunity to receive a premium for our common shares as part of a sale of our Company.

There are a large number of our common shares underlying outstanding warrants and options, and reserved for issuance under our stock option plan, that may be sold in the market, which could depress the market price of our shares and result in substantial dilution to the holders of our common shares.

The sale or issuance of a substantial amount of our common shares in the future could cause the market price of our common shares to decline. It may also impair our ability to obtain additional financing. At December 6, 2017, we had outstanding warrants to purchase approximately 1.4 million common shares at an exercise price of $1.56 per common share. In addition, at December 6, 2017, there were approximately 2.3 million common shares issuable upon the exercise of outstanding stock options, of which options to purchase approximately 712,375 common shares were denominated in Canadian dollars and had a weighted average exercise price of CAD$2.31 per common share and options to purchase approximately 1,602,819 common shares were denominated in U.S. dollars and had a weighted average exercise price of $2.58 per common share. We may also issue further warrants as part of any future financings and there remain approximately 1.7 million common shares available for future awards under our stock option plan.

We may need to raise additional funds in the future to continue our operations. Any equity offering could result in significant dilution to the ownership interests of shareholders and may result in dilution of the value of such interests and any debt offering will increase financial risk.

In order to satisfy our anticipated capital requirements to develop our product, we may need to raise additional funds through either the sale of additional equity, the issue of securities convertible into equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. The most likely sources of financing that may be available to us in the near term are the sale of common shares, securities convertible or exercisable into common shares and the issuance of debt.

We cannot predict the size of future issues of common shares or future issues of securities convertible or exercisable into common shares or the effect that any such future issues and sales of common shares or other securities will have on the market price of our common shares. Any transaction involving the issue of common shares, or securities convertible or exercisable into common shares, could result in immediate and substantial dilution to present and prospective holders of our common shares. Alternatively, we may rely on debt financing and assume debt obligations that require us to make substantial interest and capital payments and to pledge some or all of our assets as collateral to secure such debt obligations.

We have not paid any dividends since incorporation and do not anticipate declaring any dividends in the foreseeable future. As a result, you may not be able to recoup your investment through the payment of dividends on your common shares and the lack of a dividend payable on our common shares might depress the value of your investment.

For the foreseeable future, we plan to use all available funds to finance the development of our product candidate and operate of our business. Our directors will determine if and when dividends should be declared and paid in the future based on our financial position at the relevant time, but since we have no present plans to pay dividends, you should not expect receipt of dividends either for your cash needs or to enhance the value of our common shares held by you.

We may be a passive foreign investment company, or "PFIC," which could result in adverse United States federal income tax consequences to U.S. investors.

If we are a PFIC for any taxable year (or portion thereof) that is included in the holding period of a U.S. Holder (as such term is defined in the section of this prospectus supplement "Material United States And Canadian Federal Income Tax Consequences Of This Offering") of our common shares, the U.S. Holder may be subject to adverse U.S. federal income tax consequences and may be subject to additional reporting requirements. We have not made the analysis necessary to determine whether or not we are currently a PFIC or whether we have ever been a PFIC, and there can be no assurances with respect to our status as a PFIC for our current taxable year or any subsequent taxable year. Moreover, if we are a PFIC for any taxable year, we intend to provide to a U.S. Holder such information as the Internal Revenue Service ("IRS") may require, including a PFIC annual information statement, in order to enable the U.S. Holder to make and maintain a "qualified electing fund" election. We urge U.S. investors to consult their own tax advisors regarding the possible application of the PFIC rules. For a more detailed explanation of the tax consequences of PFIC classification to U.S. Holders, see the section of this prospectus supplement entitled "Material United States Federal Income Tax Considerations—Tax Consequences if We Are a Passive Foreign Investment Company." This paragraph is qualified in its entirety by the discussion below under the heading "Material United States Federal Income Tax Considerations." Each U.S. shareholder should consult its own tax advisors regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership, and disposition of our common shares.

Risks Related to this Offering

As a new investor, you will incur substantial dilution as a result of this offering and future equity issuances, and as a result, our share price could decline.

The offering price of this offering is substantially higher than the net tangible book value per share of our outstanding common shares. As a result, based on the net tangible book value of our common shares as of September 30, 2017, an investor purchasing common shares in this offering will incur immediate and substantial dilution of $ per share, based on the sale of common shares at the public offering price of $ per share, and after deducting the underwriting discount and estimated offering expenses payable by us. See the section entitled "Dilution" on page S-17 of this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase common shares in this offering.

Subject to market conditions and other factors, we may pursue raising additional funds in the future, as we continue to build our business. In future years, we will likely need to raise additional funding to finance our operations and to fund clinical trials, regulatory submissions and the development, manufacture and marketing of other products under development and new product opportunities. Accordingly, we may conduct future offerings of equity or debt securities. The exercise of outstanding options and warrants and future equity issuances, including future public offerings or future private placements of equity securities and any additional shares issued in connection with acquisitions, will also result in dilution to investors. In addition, the market price of our common shares could fall as a result of resales of any of these common shares.

You may experience future dilution as a result of future equity offerings or other equity issuances.

We may in the future issue additional common shares or other securities convertible into or exchangeable for our common shares. We cannot assure you that we will be able to sell common shares or other securities in any other offering or other transactions at a price per share that is equal to or greater than the price per share paid by investors in this offering. The price per share at which we sell additional common shares or other securities convertible into or exchangeable for our common shares in future transactions may be higher or lower than the price per share in this offering.

In addition, we have a substantial number of stock options and warrants outstanding. To the extent that outstanding stock options and warrants may be exercised or other shares issued, investors purchasing our common shares in this offering may experience further dilution.

We will have broad discretion in how we use the proceeds from this offering, and our use of the offering proceeds may not yield a favorable return on your investment.

We currently anticipate that the net proceeds from this offering will be used primarily for obtaining regulatory approvals, the potential launch of PEDMARK™, and working capital and general corporate purposes. Pending the application of the net proceeds, we intend to invest the net proceeds in investment-grade, interest-bearing securities. Our management has broad discretion over how these proceeds are used and could spend the proceeds in ways with which you may not agree, and the proceeds may not be invested in a manner that yields a favorable or any return. Our failure to use these funds effectively could have a material adverse effect on our business.

USE OF PROCEEDS

We estimate that the net proceeds of this offering, after deducting the underwriting discount and estimated offering expenses payable by us, will be approximately $ million ($ million if the underwriters exercise their over-allotment option in full).

We intend to use the net proceeds from this offering for obtaining regulatory approvals, the potential launch of PEDMARK™, and working capital and general corporate purposes. Our management will retain broad discretion over the allocation of the net proceeds from the sale of the common shares. We have no current understandings, agreements or commitments for any material acquisitions.

Therefore, investors in our common shares will be relying on the judgment of our management, who will have broad discretion regarding the application of the proceeds of this offering. The amounts and timing of our actual expenditures will depend upon numerous factors, including the amount of cash generated by our operations, our cash needs, the rate of adoption of our products by the medical community and efficiency of our product development. We may find it necessary or advisable to use portions of the proceeds from this offering for other purposes.

Pending the application of the net proceeds, we intend to invest the net proceeds in money market accounts and/or investment-grade, interest-bearing securities. Our management has broad discretion over how these proceeds are used and could spend the proceeds in ways with which you may not agree, and the proceeds may not be invested in a manner that yields a favorable or any return.

DIVIDEND POLICY

We currently intend to retain earnings, if any, to finance the growth and development of our business, and do not expect to pay any cash dividends to our shareholders in the foreseeable future.

CAPITALIZATION

The following table describes our capitalization as of September 30, 2017:

- on an actual basis; and
- on an as adjusted basis to give effect to the sale of common shares in this offering at the public offering price of $ per share, after deducting the underwriting discount and estimated offering expenses payable by us;

You should read this capitalization table together with our consolidated financial statements and the related notes and other financial information incorporated by reference in this prospectus supplement and the accompanying prospectus and the "Use of Proceeds" section.

	As of September 30, 2017	
	Actual	As Adjusted
	(in thousands, except share and per share data)	
Current Assets	$	$
Cash and cash equivalents	9,688	
Prepaid expenses	198	
Other current assets	2	
Total Assets	9,888	
Current Liabilities		
Accounts payable	492	
Accrued liabilities	165	
Derivative instruments	373	
Total Current Liabilities	1,030	
Shareholders' equity (deficit):		
Common Share, no par value; unlimited shares authorized, 15,856,738 shares issued and outstanding, shares issued and outstanding as adjusted	83,062	
Additional paid-in capital	43,631	
Accumulated deficit	(119,078)	
Accumulated other comprehensive income	1,243	
Total shareholders' equity (deficit)	8,858	
Total capitalization	$ 9,888	

Information in the above table is based on 15,856,738 shares issued and outstanding on September 30, 2017 and excludes as of that date, the following:

- 2,361,209 common shares issuable upon the exercise of outstanding options having a weighted average exercise price of $2.36 per share;
- 1,362,498 common shares issuable upon the exercise of outstanding warrants having an exercise price of $1.56 per share; and
- 1,602,975 additional common shares reserved for issuance under out stock option plan.

DILUTION

Investors in this offering will suffer immediate and substantial dilution in the net tangible book value per share of the common shares they purchase. Our net tangible book value as of September 30, 2017 was approximately $8.9 million, or approximately $0.56 per common share. Net tangible book value per share is determined by dividing our total tangible assets less total liabilities by the actual number of common shares outstanding. After giving effect to the sale of common shares in this offering at the public offering price of $ per share, and after deducting the underwriting discount and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2017 would have been approximately $ million or approximately $ per common share. This represents an immediate increase in as adjusted net tangible book value of approximately $ per share to our existing shareholders and an immediate dilution of $ per share to new investors in this offering. The following table illustrates this per share dilution:

Public offering price per common share			$
Net tangible book value per common share as of September 30, 2017	$	0.56	
Increase in net tangible book value per common share attributable to this offering	$		
As adjusted net tangible book value per common share after this offering			$
Dilution per common share to new investors			$

If the underwriters exercise their overallotment option in full, the as adjusted net tangible book value deficit after this offering would be $ per share, representing an increase in net tangible book value of $ per share to existing shareholders and immediate dilution in net tangible book value of $ per share to purchasers in this offering.

The table and discussion above are based on 15,856,738 common shares outstanding as of September 30, 2017 and excludes, as of such date, the following:

- 2,361,209 common shares issuable upon the exercise of outstanding options having a weighted average exercise price of $2.36 per share;
- 1,362,498 common shares issuable upon the exercise of outstanding warrants having an exercise price of $1.56 per share; and
- 1,602,975 additional common shares reserved for issuance under our stock option plan.

To the extent that any of the outstanding warrants or options are exercised, there will be further dilution to new investors. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity securities, the issuance of these securities could result in further dilution to our shareholders.

UNDERWRITING

Wedbush Securities Inc. is acting as representative of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of common shares set forth opposite its name below.

Underwriters	Number of Shares
Wedbush Securities Inc.	
H.C. Wainwright & Co., LLC	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The following table shows the per share and total underwriting discount to be paid to the underwriters by us at the public offering price set forth on the cover page of this prospectus supplement, less the underwriting discount. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share	Total without Over-Allotment Option	Total with Over-Allotment Option
Public Offering Price	$	$	$
Underwriting Discount	$	$	$
Proceeds, before expenses, to us	$	$	$

The representative has advised us that the underwriters propose to offer directly to the public the shares purchased pursuant to the underwriting agreement at the public offering price set forth on the cover page of this prospectus supplement and to certain securities dealers at the public offering price less a concession not in excess of $ per share. After the offering, the representative may change the offering price and other selling terms. It is expected that delivery of the common shares offered hereby will be made through the facilities of the Depository Trust Company.

We estimate that the total expenses payable by us, excluding the underwriting discount, will be approximately $.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus supplement, to purchase up to additional shares at the public offering price set forth on the cover page of this prospectus supplement, less the underwriting discount, solely to cover over-allotments, if any. If the underwriters exercise this option, each underwriter will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

Lock-Up Agreements

We, our directors and executive officers and certain of our shareholders have agreed that, for a period of 90 days, or the lock-up period, after the date of this prospectus supplement subject to certain limited exceptions described below, we and they will not directly or indirectly, without the prior written consent of the representative, (1) offer for sale, sell, pledge, or otherwise dispose of (or enter into any transaction or device that is designed to, or could be expected to, result in the disposition by any person at any time in the future of) any common shares (including, without limitation, common shares that may be deemed to be beneficially owned by us or them in accordance with the rules and regulations of the SEC and common shares that may be issued upon exercise of any options or warrants) or securities convertible into or exercisable or exchangeable for common shares, (2) enter into any swap or other derivatives transaction that transfers to another, in whole or in part, any of the economic benefits or risks of ownership of common shares, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of common shares or other securities, in cash or otherwise, (3) make any demand for or exercise any right or cause to be filed a registration statement, including any amendments thereto, with respect to the registration of any common shares or securities convertible into or exercisable or exchangeable for common shares or any of our other securities, or (4) publicly disclose the intention to do any of the foregoing.

The representative may release the common shares and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release common shares and other securities from lock-up agreements, the representative will consider, among other factors, the holder's reasons for requesting the release, the number of common shares and other securities for which the release is being requested and market conditions at the time.

Indemnification

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

Stabilization, Short Positions and Penalty Bids

The underwriters may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and penalty bids or purchases for the purpose of pegging, fixing or maintaining the price of our common shares, in accordance with Regulation M under the Exchange Act:

- Stabilizing transactions permit bids to purchase our common shares so long as the stabilizing bids do not exceed a specified maximum.

- A short position involves a sale by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase in the offering, which creates the syndicate short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriters in excess of the number of shares they are obligated to purchase is not greater than the number of shares that they may purchase by exercising their option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in their option to purchase additional shares. The underwriters may close out any short position by either exercising their option to purchase additional shares and/or purchasing shares in the open market. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through their option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

- Syndicate covering transactions involve purchases of shares in the open market after the distribution has been completed in order to cover syndicate short positions.

- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when shares originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common shares or preventing or retarding a decline in the market price of our common shares. As a result, the price of our common shares may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the Nasdaq Capital Market or otherwise and, if commenced, may be discontinued at any time.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common shares. In addition, neither we nor any of the underwriters make any representation that the underwriters will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Passive Market Making

In connection with this offering, the underwriters and any selling group members may engage in passive market making transactions in our common shares on The Nasdaq Stock Market in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of common shares and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded

Listing

Our common shares are listed on the Nasdaq Capital Market under the symbol "FENC" and on the Toronto Stock Exchange under the symbol "FRX."

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute this prospectus supplement and the accompanying prospectus by electronic means, such as e-mail.

Other Relationships

One or more of the underwriters may provide from time to time in the future certain financial advisory, investment banking and other services to us and our affiliates in the ordinary course of their business, for which they may receive customary fees and commissions. In addition, from time to time the underwriters and their affiliates may effect transactions for their own account or the accounts of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future. Representatives of the representative own 40,000 common shares.

NOTICE TO INVESTORS

Notice to Investors in the United Kingdom

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any securities which are the subject of the offering contemplated by this prospectus supplement and the related prospectus may not be made in that Relevant Member State except that an offer to the public in that Relevant Member State of any such securities may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

(b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;

(c) by the underwriter to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive); or

(d) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of these securities shall result in a requirement for the publication by the issuer or the underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any of the securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any such securities to be offered so as to enable an investor to decide to purchase any such securities, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Each underwriter has represented, warranted and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the FSMA)) received by it in connection with the issue or sale of any of the securities in circumstances in which section 21(1) of the FSMA does not apply to the issuer; and

(b) it has complied with and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

European Economic Area

In particular, this document does not constitute an approved prospectus in accordance with European Commission's Regulation on Prospectuses no. 809/2004 and no such prospectus is to be prepared and approved in connection with this offering. Accordingly, in relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (being the Directive of the European Parliament and of the Council 2003/71/EC and including any relevant implementing measure in each Relevant Member State) (each, a Relevant Member State), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) an offer of securities to the public may not be made in that Relevant Member State prior to the publication of a prospectus in relation to such securities which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of securities to the public in that Relevant Member State at any time:

- to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

- to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000; and (3) an annual net turnover of more than €50,000,000, as shown in the last annual or consolidated accounts; or

- in any other circumstances which do not require the publication by the Issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression "an offer of securities to the public" in relation to any of the securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State. For these purposes the shares offered hereby are "securities."

In Canada

The securities subject to this offering are not qualified for sale in Canada and may not be offered or sold in Canada, directly or indirectly, on our behalf. Any confirmation sent by the underwriters to purchasers of the securities subject to this offering will contain a statement that it is the underwriters' understanding that such purchaser is not a resident of Canada and that such purchasers have been given notice that their purchase of securities subject to this offering will be deemed to constitute a representation and warranty that such investor: (a) is purchasing the shares with investment intent and not for the purposes of making an immediate resale in Canada and (b) will not resell the shares to a person they actually know to be located in Canada or through the facilities of an exchange or market in Canada, for a period of 90 days from the date of their purchase.

MATERIAL UNITED STATES AND CANADIAN FEDERAL INCOME TAX CONSEQUENCES OF THIS OFFERING

The following discussion sets forth certain material United States and Canadian federal income tax consequences resulting from the acquisition, ownership and disposition of our common shares by a "U.S. Holder". For purposes of this discussion, a U.S. Holder means any U.S. person who holds common shares. For purposes of our discussion, a U.S. person is:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity taxed as a corporation for U.S. federal income tax purposes) created or organized in the United States or under the laws of the United States or any subdivision thereof;
- an estate, the income of which is includable in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust, if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust (or if the trust was in existence on August 20, 1996, and has validly elected to be treated as a U.S. person under applicable Treasury regulations); and
- for purposes of the Income Tax Act (Canada) (the "Tax Act") is neither resident nor deemed to be resident in Canada and does not use or hold, and is not deemed to use or hold our common shares held by them in connection with carrying on business in Canada (a "Non-Resident Holder").

Material U.S. Federal Income Tax Considerations

The following summary describes the material U.S. federal income tax consequences to U.S. Holders (as defined below) of acquiring, owning, and disposing of our common shares acquired pursuant to this prospectus, subject to the qualifications set forth herein.

General

Tax Consequences Not Addressed

This summary does not address all potential U.S. federal income tax considerations that may be relevant to a particular U.S. Holder. In addition, this summary does not take into account the individual facts and circumstances that may affect the U.S. federal income tax consequences to a particular U.S. Holder, including specific tax consequences under an applicable income tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any U.S. Holder. This summary does not address any U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, or non-U.S. tax considerations, and does not discuss tax reporting requirements that may be applicable to any particular U.S. Holder. Each prospective investor should consult a professional tax advisor with respect to the U.S. federal income, U.S. alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences of acquiring, owning, and disposing of our common shares.

Authorities

This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), the United States Treasury Regulations (whether final, temporary, or proposed) promulgated thereunder, the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the "Canada-U.S. Tax Convention"), and administrative rulings and judicial decisions interpreting the Code and the United States Treasury Regulations, all as currently in effect, and all subject to differing interpretations or change, possibly on a retroactive basis. We have not sought, and will not seek, a ruling from the IRS regarding any matter discussed herein, and no assurance can be given that the IRS would not assert, or that a court would not sustain, a position that is different from, and contrary to, the positions taken in this summary. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation.

U.S. Holders

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of common shares acquired pursuant to this prospectus that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States (as determined under U.S. federal income tax rules);
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or of any political subdivision of the United States;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust that (i) is subject to the primary supervision of a court within the United States and the control of one or more U.S. persons for all substantial decisions or (ii) has a valid election in effect under applicable United States Treasury Regulations to be treated as a U.S. person.

An individual may be a resident for U.S. federal income tax purposes in any calendar year if the individual was present in the United States for at least 31 days in that calendar year and for an aggregate of at least 183 days during the three-year period ending with the current calendar year. For purposes of this calculation, all of the days present in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year are counted. Residents are taxed for U.S. federal income tax purposes as if they were U.S. citizens.

Non-U.S. Holders Not Addressed

For purposes of this summary, a "non-U.S. Holder" is a beneficial owner of common shares that is not a U.S. Holder and is not a partnership for U.S. federal income tax purposes. This summary does not address the U.S. federal income tax consequences to non-U.S. Holders of acquiring, owning, and disposing of common shares. Each prospective investor should consult a professional tax advisor with respect to the U.S. federal income, U.S. alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences of acquiring, owning, and disposing of our common shares.

Certain U.S. Holders Not Addressed

This summary does not address the U.S. federal income tax considerations applicable U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders that:

- are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts;
- are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies;
- are broker-dealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method;
- have a "functional currency" other than the U.S. dollar;
- own common shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position;
- acquired common shares in connection with the exercise of employee stock options or otherwise as compensation for services;
- hold common shares other than as a capital asset within the meaning of section 1221 of the Code (generally, property held for investment purposes);
- are partnerships or other "pass-through" entities for U.S. federal income tax purposes (or investors in such partnerships or entities);
- own, have owned, or will own (directly, indirectly, or by attribution) 10% or more of the total combined voting power of the outstanding shares of your company;
- are U.S. expatriates or former long-term residents of the United States;
- have been, are, or will be residents or deemed to be residents in Canada for purposes of the Income Tax Act (Canada) (the "Tax Act");
- use or hold, will use or hold, or that are or will be deemed to use or hold common shares in connection with carrying on a business in Canada;
- are persons whose common shares constitute "taxable Canadian property" under the Tax Act; or
- have a permanent establishment in Canada for the purposes of the Canada-U.S. Tax Convention.

U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders described immediately above, should consult their own tax advisors regarding the U.S. federal income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences of acquiring, owning, and disposing of our common shares.

The following summary is not a substitute for careful tax planning and advice. U.S. Holders of common shares are urged to consult their own tax advisors concerning the U.S. federal income tax consequences of the issues discussed herein, in light of their particular circumstances, as well as any considerations arising under the laws of any foreign, state, local, or other taxing jurisdiction.

General Rules Applicable to the Ownership and Disposition of Common Shares

The following discussion describes the general rules applicable to the ownership and disposition of the common shares but is subject in its entirety to the special rules described below under the headings entitled "Tax Consequences if We Are a Passive Foreign Investment Company" and "Tax Consequences if We are a Controlled Foreign Corporation."

Distributions on Common Shares

The gross amount of any distribution (including amounts, if any, withheld in respect of Canadian withholding tax) actually or constructively received by a U.S. Holder with respect to our common shares will be taxable to the U.S. Holder as a dividend to the extent of our current or accumulated earnings and profits as determined under U.S. federal income tax principles. Distributions to a U.S. Holder in excess of earnings and profits will be treated first as a return of capital that reduces a U.S. Holder's tax basis in such common shares (thereby increasing the amount of gain or decreasing the amount of loss that a U.S. Holder would recognize on a subsequent disposition of our common shares), and then as gain from the sale or exchange of such common shares (see "Sale or Other Taxable Disposition of Our Common Shares"). The amount of any distribution of property other than cash will be the fair market value of that property on the date of distribution. In the event we make distributions to holders of common shares, we may or may not calculate our earnings and profits under U.S. federal income tax principles. If we do not do so, any distribution may be required to be regarded as a dividend, even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain. The amount of the dividend will generally be treated as foreign-source dividend income to U.S. Holders.

Non-corporate U.S. Holders, including individuals, will generally be eligible for the preferential U.S. federal rate on "qualified dividend income," provided that we are a "qualified foreign corporation," the stock on which the dividend is paid is held for a minimum holding period, and other requirements are satisfied. A "qualified foreign corporation" includes a foreign corporation that is not a PFIC in the year of the distribution or in the prior taxable year and that is eligible for the benefits of an income tax treaty with the United States that contains an exchange of information provision and has been determined by the United States Treasury Department to be satisfactory for purposes of the legislation (such as the Canada-U.S. Tax Convention).

Distributions to U.S. Holders generally will not be eligible for the "dividends received deduction" generally allowed to U.S. corporations in respect of dividends received from other U.S. corporations.

Sale or Other Taxable Disposition of Our Common Shares

Upon the sale, exchange, or other taxable disposition of our common shares, a U.S. Holder generally will recognize gain or loss equal to the difference between the amount realized upon the sale, exchange, or other disposition and such U.S. Holder's tax basis in such common shares sold or otherwise disposed of. If the U.S. holder receives Canadian dollars in the transaction, the amount realized will be the U.S. dollar value of the Canadian dollars received, which is determined for cash basis taxpayers on the settlement date for the transaction and for accrual basis taxpayers on the trade date (although accrual basis taxpayers can also elect the settlement date). A U.S. Holder's tax basis in common shares generally will be such holder's U.S. dollar cost for such common shares. Gain or loss recognized on such sale or other disposition generally will be long-term capital gain or loss if, at the time of the sale or other disposition, the common shares have been held for more than one year.

Preferential tax rates currently apply to long-term capital gain of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gain of a corporate U.S. Holder. Deductions for capital losses are subject to significant limitations under the Code. The gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes.

Additional Medicare Tax on Net Investment Income

Certain U.S. Holders that are individuals, estates, or trusts (other than trusts that are exempt from tax) are subject to a tax of 3.8% on "net investment income" (or undistributed "net investment income," in the case of estates and trusts) for each taxable year, with such tax applying to the lesser of such income or the excess of such person's adjusted gross income (with certain adjustments) over a specified amount. Net investment income includes dividends on the common shares and net gains from the disposition of the common shares.

U.S. Holders that are individuals, estates, or trusts should consult their own tax advisors regarding the applicability of this tax to any of their income or gains in respect of the common shares.

Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency, or on the sale, exchange, or other taxable disposition of common shares, generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). If the foreign currency received is not converted into U.S. dollars on the date of receipt, a U.S. Holder will have a tax basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who converts or otherwise disposes of the foreign currency after the date of receipt may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Different rules apply to U.S. Holders who use the accrual method of tax accounting. Each U.S. Holder should consult its own U.S. tax advisors regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the common shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income that is subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year.

Complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of a U.S. Holder's U.S. federal income tax liability that such U.S. Holder's "foreign source" taxable income bears to such U.S. Holder's worldwide taxable income. In applying this limitation, a U.S. Holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source." Generally, dividends paid by a foreign corporation (including constructive dividends) should be treated as foreign source for this purpose, and gains recognized on the sale of stock of a foreign corporation by a U.S. Holder should be treated as U.S. source for this purpose, except as otherwise provided in an applicable income tax treaty, and if an election is properly made under the Code. However, the amount of a distribution with respect to the common shares that is treated as a "dividend" may be lower for U.S. federal income tax purposes than it is for Canadian federal income tax purposes, resulting in a reduced foreign tax credit allowance to a U.S. Holder. In addition, this limitation is calculated separately with respect to specific categories of income. The foreign tax credit rules are complex, and each U.S. Holder should consult its own U.S. tax advisors regarding the foreign tax credit rules.

Information Reporting and Backup Withholding

Under U.S. federal income tax law, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, certain U.S. Holders who hold certain "specified foreign financial assets" that exceed certain thresholds are required to report information relating to such assets. The definition of "specified foreign financial assets" generally includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person, and any interest in a foreign entity. U.S. Holders may be subject to these reporting requirements unless their common shares are held in an account at certain financial institutions. Significant penalties may apply for failure to satisfy applicable reporting obligations.

Distributions paid with respect to common shares and proceeds from a sale, exchange, or redemption of common shares made within the United States or through certain U.S.-related financial intermediaries may be subject to information reporting to the IRS and possible U.S. backup withholding (at a rate of 28%). Backup withholding will not apply, however, to a U.S. Holder who furnishes a correct U.S. taxpayer identification number and makes any other required certification on IRS Form W-9 or that is a corporation or other entity that is otherwise exempt from backup withholding. Each U.S. Holder should consult its own tax advisors regarding the application of the U.S. information reporting and backup withholding rules. Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a holder's U.S. federal income tax liability, and such holder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing an appropriate claim for refund with the IRS and furnishing any required information in a timely manner.

The discussion of reporting requirements set forth above is not intended to constitute a complete description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax and, under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. U.S. Holders should consult with their own tax advisors regarding their reporting obligations, if any, as a result of their acquisition, ownership, or disposition of our common shares.

Tax Consequences if We are a Passive Foreign Investment Company

A foreign corporation generally will be treated as a "passive foreign investment company" ("PFIC") if, after applying certain "look-through" rules, either (i) 75% or more of its gross income is passive income or (ii) 50% or more of the average value of its assets is attributable to assets that produce or are held to produce passive income. Passive income for this purpose generally includes dividends, interest, rents, royalties and gains from securities and commodities transactions. The look-through rules require a foreign corporation that owns at least 25% by value of the stock of another corporation to treat a proportionate amount of assets and income as held or received directly by the foreign corporation.

We have not made the analysis necessary to determine whether or not we are currently a PFIC or whether we have ever been a PFIC. There can be no assurance that we are not, have never been or will not in the future be a PFIC. If we were to be treated as a PFIC, any gain recognized by a U.S. shareholder upon the sale (or certain other dispositions) of our common shares (or the receipt of certain distributions) generally would be treated as ordinary income, and a U.S. shareholder may be required, in certain circumstances, to pay an interest charge together with tax calculated at maximum rates on certain "excess distributions," including any gain on the sale or certain dispositions of our common shares. In order to avoid this tax consequence, a U.S. shareholder (i) may be permitted to make a "qualified electing fund" election, in which case, in lieu of such treatment, such shareholder would be required to include in its taxable income certain undistributed amounts of our income or (ii) may elect to mark-to-market our common shares and recognize ordinary income (or possible ordinary loss) each year with respect to such investment and on the sale or other disposition of the common shares. Additionally, if we are deemed to be a PFIC, a U.S. shareholder who acquires our common shares from a decedent will be denied the normally available step-up in tax basis to fair market value for the common shares at the date of the death and instead will have a tax basis equal to the decedent's tax basis if lower than fair market value. Neither we nor our advisors have the duty to or will undertake to inform U.S. shareholders of changes in circumstances that would cause us to become a PFIC. U.S. shareholders should consult their own tax advisors regarding the application of the PFIC rules including eligibility for and the manner and advisability of making certain elections in the event we are determined to be a PFIC at any point in time after the date of this prospectus supplement. We intend to take the action necessary for a U.S. shareholder to make a "qualified electing fund" election in the event we are a PFIC.

Further, excess distributions treated as dividends, gains treated as excess distributions and mark-to-market inclusions and deductions, all under the PFIC rules discussed above, are all included in the calculation of net investment income for purposes of the 3.8% tax described above under the subheading entitled "Additional Medicare Tax on Net Investment Income". United States Treasury Regulations provide, subject to the election described in the following paragraph, that solely for purposes of this additional tax, distributions of previously taxed income will be treated as dividends and included in net investment income subject to the additional 3.8% tax. Additionally, to determine the amount of any capital gain from the sale or other taxable disposition of common shares that will be subject to the additional tax on net investment income, a U.S. Holder who has made a "qualified electing fund" election will be required to recalculate its basis in the common shares excluding basis adjustments resulting from the "qualified electing fund" election. Alternatively, a U.S. Holder may make an election which will be effective with respect to all interests in a PFIC for which a "qualified electing fund" election has been made and which is held in that year or acquired in future years. Under this election, a U.S. Holder pays the additional 3.8% tax on income inclusions resulting from the "qualified electing fund" election and on gains calculated after giving effect to related tax basis adjustments.

Tax Consequences if We are a Controlled Foreign Corporation

A foreign corporation will be treated as a "controlled foreign corporation" ("CFC") for U.S. federal income tax purposes if, on any day during the taxable year of such foreign corporation, more than 50% of the equity interests in such corporation, measured by reference to the combined voting power or value of the equity of the corporation, is owned directly or by application of the attribution and constructive ownership rules of Sections 958(a) and 958(b) of the Code by United States Shareholders. For this purpose, a "United States Shareholder" is any United States person that possesses directly, or by application of the attribution and constructive ownership rules of Sections 958(a) and 958(b) of the Code, 10% or more of the combined voting power of all classes of equity in such corporation. If a foreign corporation is a CFC for an uninterrupted period of 30 days or more during any taxable year, each United States Shareholder of our Company who owns, directly or indirectly, our common shares on the last day of the taxable year on which we are a CFC will be required to include in its gross income for United States federal income tax purposes its pro rata share of our "Subpart F income," even if the Subpart F income is not distributed. Subpart F income generally includes passive income but also includes certain related party sales, manufacturing and services income. If we are a CFC, the PFIC rules set forth above, even if we are otherwise considered to be a PFIC, will not be applicable.

United States persons who might, directly, indirectly or constructively, acquire 10% or more of our common shares, and therefore might be a United States Shareholder, should consider the possible application of the CFC rules, and consult a tax advisor with respect to such matter.

Material Canadian Federal Income Tax Considerations

Non-Residents of Canada

The following portion of the summary is generally applicable to a U.S. Holder. Special rules, which are not discussed in this summary, may apply to a U.S. Holder that is an insurer that carries on an insurance business in Canada and elsewhere.

Disposition of Common Shares

Upon the disposition by a U.S. Holder of common shares in our Company, the U.S. Holder will not be subject to tax under the Tax Act in respect of any capital gain realized unless the common shares disposed of constitutes "taxable Canadian property" of the U.S. Holder and the U.S. Holder is not entitled to relief under an applicable tax treaty or convention. Common shares will generally not constitute "taxable Canadian property" of such U.S. Holder unless at any time in the preceding 60 months both of the following statements were true: (a) the U.S. Holder, together with either (i) persons with whom the U.S. Holder does not deal at arm's length or (ii) partnerships in which the U.S. Holder or a person in (a) directly or indirectly hold membership interests, held shares and/or rights to acquire shares representing 25% or more of the issued shares of any class of our capital stock; and (b) more than 50% of the fair market value of our common stock was derived directly or indirectly from one or any combination of (i) real or immovable property situated in Canada, (ii) Canadian resource properties, (iii) timber resource properties, and (iv) options in respect of, or interests in, or for civil law rights in, property described in any of (i) to (iii).

U.S. Holders whose common shares constitute "taxable Canadian property" should consult their own tax advisors for advice having regard to their particular circumstances.

Dividends Paid on Common Shares

Dividends paid, credited or deemed to have been paid or credited on our common shares held by a U.S. Holder will be subject to a Canadian withholding tax under the Tax Act at a rate of 25% of the gross amount of the dividends, subject to reduction by any applicable tax convention. Under the tax convention between Canada and the United States (the "Tax Treaty"), the rate of withholding tax on dividends generally applicable to U.S. Holders who beneficially own the dividends is reduced to 15%. In the case of U.S. Holders that are corporations that beneficially own at least 10% of our voting shares, the rate of withholding tax on dividends generally is reduced to 5%. So-called "fiscally transparent" entities, such as United States limited liability companies, or LLCs, are not entitled to rely on the terms of the Tax Treaty, however a member of such entity will be considered to have received the dividend directly and to benefit from the reduced rates under the Tax Treaty, where the member is considered under U.S. taxation law to have derived the dividend through that entity and by reason of the entity being a fiscally transparent entity, the treatment of the dividend is the same as its treatment would be if the amount had been derived directly by the member. Members of such entities are regarded as holding their proportionate share of our common shares held by the entity for the purposes of the Tax Treaty.

LEGAL MATTERS

Certain legal matters in connection with the securities offered hereby will be passed upon for us by LaBarge Weinstein LLP, Ottawa, Ontario. Lowenstein Sandler LLP, New York, New York is acting as counsel to the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements of Fennec Pharmaceuticals Inc. appearing in our Annual Report on Form 10-K for the year ended December 31, 2016 have been audited by Deloitte LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference in reliance upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are only parts of a registration statement on Form S-3 (File No. 333-221093) that we filed with the SEC under the Securities Act and do not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement or the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference in this prospectus supplement and the accompanying prospectus for a copy of such contract, agreement or other document.

We are a public company and file proxy statements, annual, quarterly and special reports and other information with the SEC. The registration statement, such reports and other information can be inspected and copied at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington D.C. 20549. Copies of such materials, including copies of all or any portion of the registration statement, can be obtained from the Public Reference Room of the SEC at prescribed rates. You can call the SEC at 1-800-SEC-0330 to obtain information on the operation of the Public Reference Room. Such materials may also be accessed electronically by means of the SEC's home page on the Internet (www.sec.gov).

We make our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports available through our website, free of charge, as soon as reasonably practicable after we file such material with, or furnish it to the SEC. Our website address is www.fennecpharma.com. We have included our website address in this prospectus supplement solely as an inactive textual reference. The information contained on, or that can be accessed through, our website is not part of this prospectus supplement.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Information contained in this prospectus supplement and the accompanying prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus supplement and the accompanying prospectus will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings (other than Current Reports on Form 8-K furnished under Item 2.02 or Item 7.01 and exhibits filed on such form that are related to such items) we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the prospectus supplement and until the termination of this offering:

- our Annual Report on Form 10-K for the year ended December 31, 2016;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2017, June 30, 2017 and September 30, 2017;
- our Current Reports on Form 8-K filed with the SEC on May 17, 2017, June 9, 2017, June 29, 2017, September 13, 2017, September 29, 2017 and October 16, 2017; and

- the description of our common shares set forth in our registration statement on Form 8-A filed with the SEC on September 11, 2017, including any amendments or reports filed for the purpose of updating such description.

To receive a free copy of any of the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, other than any exhibits, unless the exhibits are specifically incorporated by reference into this prospectus, call or write us at the following address and telephone number:

Fennec Pharmaceuticals Inc.
PO Box 13628
68 TW Alexander Drive
Research Triangle Park, North Carolina 27709
(919) 636-4530

$90,000,000
Common stock

Fennec Pharmaceuticals Inc. may offer from time to time up to an aggregate of $90,000,000 of common stock in one or more offerings.

This prospectus describes the general manner in which these securities may be offered and sold. If necessary, the specific manner in which these securities may be offered and sold will be described in a supplement to this prospectus.

Our common stock is listed on The Nasdaq Capital Market ("NASDAQ") under the symbol "FENC" and on the Toranto Stock Exchange ("TSX") under the symbol "FRX.". The last reported sale price of the shares of our common stock on NASDAQ on October 5, 2017, was $11.74 per share. The aggregate market value of our common stock held by non-affiliates pursuant to General Instruction I.B.6 of Form S-3 is $104,347,526.70, which was calculated based on 8,888,205 shares of our common stock outstanding held by non-affiliates and at a price of $11.74 per share, which was the closing price of our common stock on October 5, 2017. As of the date of this prospectus, we have not sold any common stock pursuant to General Instruction I.B.6 to Form S-3 during the prior 12 calendar month period that ends on and includes the date of this prospectus.

Investing in our securities involves risks. You should carefully consider the risks described under "Risk Factors" in Item 1A of our most recent Annual Report on Form 10-K and Item 1A of any subsequently filed Quarterly Reports on Form 10-Q (which documents are incorporated by reference herein), as well as the other information contained or incorporated by reference in this prospectus or in any prospectus supplement hereto before making a decision to invest in our securities. See "Where You Can Find More Information" below.

Neither the Securities and Exchange Commission nor any state securities commission or other regulatory body has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 3, 2017

TABLE OF CONTENTS

You should rely only on the information contained or incorporated by reference in this prospectus or any supplement to this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer to sell or seeking an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus or any supplement to this prospectus is accurate as of any date other than the date on the front cover of those documents. You should read all information supplementing this prospectus.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission using a "shelf" registration process. Under the shelf registration process, we may offer from time to time up to an aggregate of $90,000,000 of common stock in one or more offerings.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you should rely on the information in the prospectus supplement. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to a particular offering. For the securities being sold, the prospectus supplement will include the names of the underwriters, dealers or agents, if any, their compensation, the terms of the offering, and the net proceeds to the Company. The prospectus supplement may also contain additional information about certain United States federal income tax considerations relating to the securities covered by the prospectus supplement. You should read both this prospectus and any prospectus supplement, together with additional information described under the heading "Where You Can Find More Information."

Unless the context suggests otherwise, references in this prospectus to "Fennec Pharmaceuticals," the "Company," "we," "us" and "our" refer to Fennec Pharmaceuticals Inc. and its consolidated subsidiaries.

FENNEC PHARMACEUTICALS INC.

This is only a summary and may not contain all the information that is important to you. You should carefully read both this prospectus and any accompanying prospectus supplement and any other offering materials, together with the additional information described under the heading "Where You Can Find More Information". Unless otherwise noted, the terms "Fennec Pharmaceuticals", "the Company," "we," "us," and "our" refer to Fennec Pharmaceuticals Inc. and its wholly-owned subsidiaries.

We incorporated under the laws of Canada in September 1996. On August 25, 2011, we continued from the laws of Canada under the *Canada Business Corporations Act* (the "CBCA") to the laws of British Columbia in accordance with Section 302 of the *Business Corporations Act (British Columbia)* (the "Continuance").

Our principal executive offices are located at PO BOX 13628, 68 TW Alexander Drive, Research Triangle Park, NC 27709. Our telephone number is (919) 636-4530. Our website is www.fennecpharma.com. Information contained in our website does not constitute part of this prospectus.

We are a biopharmaceutical company focused on the development of Sodium Thiosulfate ("STS") for the prevention of platinum-induced ototoxicity in pediatric cancer patients.

FORWARD LOOKING STATEMENTS

This prospectus contains or incorporates by reference forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which reflect our current views with respect to, among other things, our operations and financial performance. In some cases, you can identify these forward-looking statements by the use of words such as "outlook", "believes", "expects", "potential", "continues", "may", "will", "should", "seeks", "approximately", "predicts", "intends", "plans", "estimates", "anticipates" or the negative version of these words or other comparable words. Such forward-looking statements are subject to various risks and uncertainties. These forward-looking statements are not historical facts and are based on current expectations, estimates and projections about Fennec Pharmaceuticals's industry, management's beliefs and certain assumptions made by management, many of which, by their nature, are inherently uncertain and beyond our control.

Accordingly, there are or will be important factors that could cause actual outcomes or results to differ materially from those indicated in these statements. All statements other than statements of historical fact are forward-looking statements and are based on various underlying assumptions and expectations and are subject to known and unknown risks, uncertainties and assumptions, and may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. We believe these factors include, but are not limited to, those described under "Risk Factors" in Item 1A of our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the SEC on March 29, 2017, and Item 1A of any subsequently filed Quarterly Reports on Form 10-Q, as such factors may be updated from time to time in our periodic filings with the SEC (which documents are incorporated by reference herein), as well as the other information contained or incorporated by reference in this prospectus or in any prospectus supplement hereto. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included or incorporated by reference in this prospectus or in any prospectus supplement hereto. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise.

WHERE YOU CAN FIND MORE INFORMATION

We are required to file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC"). You may read and copy any documents filed by us at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room. Our filings with the SEC are also available to the public through the SEC's Internet site at *http://www.sec.gov*. We make available free of charge on our website (http://www.Fennecpharma.com) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with the SEC.

We have filed a registration statement on Form S-3 with the SEC relating to the securities covered by this prospectus. This prospectus is a part of the registration statement and does not contain all of the information in the registration statement. Whenever a reference is made in this prospectus to a contract or other document of ours, please be aware that the reference is only a summary and that you should refer to the exhibits that are part of the registration statement for a copy of the contract or other document. You may review a copy of the registration statement at the SEC's public reference room in Washington, D.C., as well as through the SEC's Internet site.

The SEC's rules allow us to "incorporate by reference" information into this prospectus. This means that we can disclose important information to you by referring you to another document. Any information referred to in this way is considered part of this prospectus from the date we file that document. Any reports filed by us with the SEC after the date of the initial registration statement and prior to effectiveness of the registration statement and any reports filed by us with the SEC after the date of this prospectus and before the date that the offerings of the securities by means of this prospectus are terminated will automatically update and, where applicable, supersede any information contained in this prospectus or incorporated by reference in this prospectus.

We incorporate by reference into this prospectus the following documents or information filed with the SEC:

(1) Annual Report on Form 10-K for the year ended December 31, 2016, filed on March 29, 2017 (File No. 001-32295);

(2) Quarterly Reports on Form 10-Q for the quarters ended March 31, 2017 and June 30, 2017 filed with the Commission on May 12, 2017 and August 14, 2017, respectively (File No. 001-32295);

(3) Current Reports on Form 8-K as filed with the SEC on May 17, 2017, June 9, 2017, June 29, 2017, September 13, 2017, September 29, 2017 and October 16, 2017 (other than any reports or portions thereof that are furnished under Item 2.02 or Item 7.01 and any exhibits included with such Items) (File No. 001-32295);

(4) the description of our capital stock contained in our Registration Statement on Form 8-A filed with the Commission on September 11, 2017 (File No. 001-32295), including any amendment or report filed for the purpose of updating such description; and

(5) All documents filed by us under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement and after the date of this prospectus and before the termination of the offerings to which this prospectus relates.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus, excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. You can request those documents from the Corporate Secretary, Fennec Pharmaceuticals Inc., at 68 TW Alexander Drive, Research Triangle Park, NC 27709. You may also contact the Corporate Secretary at (919) 636-4530.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from our sale of securities pursuant to this prospectus to pursue the research and development of STS, as well as working capital and general corporate purposes, including to fund our ongoing research and development and product initiatives. We have not allocated the proceeds to these purposes as of the date of this prospectus. Allocation of the proceeds of a particular series of securities, or the principal reasons for the offering, if no allocation has been made, will be described in the applicable prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

The following summary of the terms of our capital stock does not purport to be complete and is subject to and qualified in its entirety by reference to our Articles of Incorporation and our Bylaws, each of which may be further amended from time to time and both of which are incorporated herein by reference.

General

As of October [ ], 2017 our authorized capital stock consists of unlimited shares of common stock, no par value per share. As of September 30, 2017, 15,856,738 shares of common stock were issued and outstanding.

Common Stock

Pursuant to our Notice of Articles and Articles, as amended, we are authorized to issue an unlimited number of common shares, no par value. Each holder of a Share is entitled to one vote for each common share held on all matters submitted to a vote of shareholders. We have not provided for cumulative voting for the election of directors in our Notice of Articles or Articles, as amended. This means that the holders of a majority of the shares voted can elect all of the directors then standing for election. The holders of outstanding our common shares are entitled to receive dividends out of assets legally available at the times and in the amounts that our board of directors may determine from time to time.

Holders of common shares have no preemptive subscription, redemption or conversion rights or other subscription rights. Upon our liquidation, dissolution or winding-up, the holders of common shares are entitled to share in all assets remaining after payment of all liabilities. The rights of the holders of our common stock are subject to, and may be adversely affected by, the rights of holders of shares of any preferred stock that we may designate and issue in the future. Each outstanding common share is, and all common shares to be issued in this offering, when they are paid for, will be fully paid and non-assessable.

Computershare is the transfer agent for our common stock.

Our common stock is listed on the NASDAQ Capital Market under the symbol “FENC”.

Exchange Controls, Restrictions on Voting or Ownership

There is currently no law, governmental decree or regulation in Canada that restricts the export or import of capital, or which would affect the remittance of dividends, interest or other payments by us to a non-resident holder of our common shares, other than applicable tax requirements.

There is currently no limitation imposed by the laws of Canada or by our Notice of Articles or Articles on the right of a non-resident to hold or vote our common shares, other than those imposed by the *Investment Canada Act* and the *Competition Act* (Canada). These acts will generally not apply except where control of an existing Canadian business or company, which has Canadian assets or revenue over a certain threshold, is acquired and will not apply to trading generally of securities listed on a stock exchange. A reviewable acquisition may not proceed unless the relevant minister is satisfied that the investment is likely to be of net benefit to Canada.

Shareholders' Rights Plan

The Company adopted a shareholder rights plan agreement (the "Rights Plan") on June 27, 2017. The Rights Plan was adopted to ensure, to the extent possible, that all of our shareholders are treated fairly and equally in connection with any take-over bid or other acquisition of control. Generally stated, the Rights Plan is designed to address this purpose by requiring any potential transaction that will result in a person (an "Acquiring Person") owning, in the aggregate, 20% or more of our outstanding common stock (inclusive of any shares of common stock held by the Acquirer, its associates and affiliates, and any person acting jointly or in concert with any of them (collectively, the "Acquirer Group")) to be structured as a formal take-over bid that satisfies certain minimum requirements relating primarily to the manner in which the bid must be made, the minimum number of days the bid must remain open, and the minimum number of shares that must be acquired under the bid. Non-compliant transactions may, through the operation of the Rights Plan and the rights issued thereunder, result in the Acquirer Group's common stock position in us being substantially diluted. Consequentially, the Rights Plan incentivizes the Acquirer to structure its proposed transaction in a manner that complies with the minimum requirements prescribed by the Rights Plan, thereby helping fulfill the purpose of the Rights Plan. One right (a "Right") is issued and attached to each share of common stock. This includes all common stock issued as of theeffective date of the Rights Plan and all shares of common stock issued after the effective date of the Rights Plan but prior to the eighth trading day after the earlier of public announcement of of a take-over bid (other than a take over bid that is a permitted bid or a competing permitted bid, as the case may be, under the Rights Plan) or the date upon which a permitted bid or competing permitted bid under the Rights Plan ceases to be such, or such later date as may be determined by our board of directors.

CERTAIN ERISA MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the offered securities may, subject to certain legal restrictions, be held by (i) an "employee benefit plan" (as defined in Section 3(3) of the Employee Retirement Security Act of 1974, as amended ("ERISA")) that is subject to Title I of ERISA, (ii) a "plan" as defined in, and subject to, Section 4975 of the Code or (iii) a "benefit plan investor" within the meaning of Section 3(42) of ERISA. A fiduciary of any such employee benefit plan, plan, or benefit plan investor must determine that the purchase, holding and disposition of an interest in such offered security is consistent with its fiduciary duties and will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code.

PLAN OF DISTRIBUTION

We may from time to time offer and sell some or all of the securities covered by this prospectus. Registration of securities covered by this prospectus does not mean, however, that those securities necessarily will be offered or sold.

The securities covered by this prospectus may be sold from time to time, at market prices prevailing at the time of sale, at prices related to market prices, at a fixed price or prices subject to change or at negotiated prices, by a variety of methods including the following:

- on the NASDAQ Capital Market (including through at the market offerings);
- on the Toronto Stock Exchange (including through at the market offerings);
- in the over-the-counter market;
- in privately negotiated transactions;

- through broker/dealers, who may act as agents or principals;
- through one or more underwriters on a firm commitment or best-efforts basis;
- in a block trade in which a broker/dealer will attempt to sell a block of securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- through put or call option transactions relating to the securities;
- directly to one or more purchasers;
- through agents; or
- in any combination of the above.

In effecting sales, brokers or dealers engaged by us may arrange for other brokers or dealers to participate. Broker/dealer transactions may include:

- purchases of securities by a broker/dealer as principal and resales of the securities by the broker/dealer for its account pursuant to this prospectus;
- ordinary brokerage transactions; or
- transactions in which the broker/dealer solicits purchasers on a best efforts basis.

We have not entered into any agreements, understandings or arrangements with any underwriters or broker/dealers regarding the sale of the securities covered by this prospectus. At any time a particular offer of the securities covered by this prospectus is made, a revised prospectus or prospectus supplement, if required, will set forth the aggregate amount of securities covered by this prospectus being offered and the terms of the offering, including the name or names of any underwriters, dealers, brokers or agents. In addition, to the extent required, any discounts, commissions, concessions and other items constituting underwriters' or agents' compensation, as well as any discounts, commissions or concessions allowed or reallowed or paid to dealers, will be set forth in such revised prospectus supplement. Any such required prospectus supplement, and, if necessary, a post-effective amendment to the Registration Statement of which this prospectus is a part, will be filed with the SEC to reflect the disclosure of additional information with respect to the distribution of the securities covered by this prospectus.

To the extent required, the applicable prospectus supplement will set forth whether or not underwriters may over-allot or effect transactions that stabilize, maintain or otherwise affect the market price of the securities at levels above those that might otherwise prevail in the open market, including, for example, by entering stabilizing bids, effecting syndicate covering transactions or imposing penalty bids.

If we utilize a dealer in the sale of the securities being offered pursuant to this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

We may also authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the revised prospectus or prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The conditions to these contracts and the commission that we must pay for solicitation of these contracts will be described in a revised prospectus or prospectus supplement.

In connection with the sale of the securities covered by this prospectus through underwriters, underwriters may receive compensation in the form of underwriting discounts or commissions and may also receive commissions from purchasers of securities for whom they may act as agent. Underwriters may sell to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agent.

Any underwriters, broker/dealers or agents participating in the distribution of the securities covered by this prospectus may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by any of those underwriters, broker/dealers or agents may be deemed to be underwriting commissions under the Securities Act.

We may agree to indemnify underwriters, broker/dealers or agents against certain liabilities, including liabilities under the Securities Act, and may also agree to contribute to payments which the underwriters, broker/dealers or agents may be required to make.

Certain of the underwriters, broker/dealers or agents who may become involved in the sale of the securities may engage in transactions with and perform other services for us in the ordinary course of their business for which they receive customary compensation.

Some or all of the securities may be new issues of securities with no established trading market. Any underwriters that purchase the securities for public offering and sale may make a market in such securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We make no assurance as to the liquidity of or the trading markets for any securities.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us LaBarge Weinstein LLP, Ottawa, Ontario. Underwriters, dealers or agents, if any, who we identify in a prospectus supplement may have their own counsel pass upon certain legal matters in connection with the shares of common stock offered under this prospectus.

EXPERTS

The consolidated financial statements of Fennec Pharmaceuticals Inc. appearing in Fennec Pharmaceuticals Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2016, have been audited by Deloitte LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference in reliance upon the authority of said firm as experts in accounting and auditing.

Shares

FENNEC PHARMACEUTICALS INC.

Common Shares

PROSPECTUS SUPPLEMENT

December , 2017

Sole Book-Running Manager
Wedbush PacGrow

Co-Manager
H.C. Wainwright & Co.