



Up to US\$30,000,000 Common Shares

We have entered into a sales agreement with B. Riley FBR, Inc., or B. Riley FBR, relating to the sale of our common shares, no par value per common share, offered by this prospectus supplement. In accordance with the terms of the sales agreement, we may offer and sell from time to time our common shares having an aggregate offering price of up to US\$30,000,000 through or to B. Riley FBR, acting as sales agent or principal.

Our common shares trade on the NASDAQ Stock Market, or NASDAQ, and on the TSX Venture Exchange, or TSXV, under the symbol "ACST". On February 13, 2019, the last reported sale price for our common shares on NASDAQ was US\$0.88 per common share and on the TSXV was \$1.16 per share.

Sales of our common shares, if any, under this prospectus supplement may be made by any method deemed to be an "at the market offering" as defined in Rule 415 under the U.S. Securities Act of 1933, as amended, or the Securities Act.

B. Riley FBR is not required to sell any specific number of our common shares. B. Riley FBR has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of NASDAQ, on mutually agreed terms between B. Riley FBR and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

B. Riley FBR will be entitled to compensation under the terms of the sales agreement at a commission rate equal to 4.0% of the gross proceeds from each sale of our common shares for up to and including US\$10 million of the gross proceeds and 3.0% of the gross proceeds from each sale of our common shares for gross proceeds in excess of US\$10 million. The net proceeds from any sales under this prospectus supplement will be used as described under "Use of Proceeds." The proceeds we receive from sales of our common shares, if any, will depend on the number of shares actually sold and the sale price of such shares.

In connection with the sale of our common shares on our behalf, B. Riley FBR will be deemed to be an underwriter within the meaning of the Securities Act, and its compensation as the sales agent will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to B. Riley FBR with respect to certain liabilities, including liabilities under the Securities Act.

Investing in our common shares involves a high degree of risk. Please consider carefully the "Risk Factors" section beginning on page S-11 of this prospectus supplement and page 6 of the accompanying prospectus, as well as the section captioned "Item 3 – Key Information – D. Risk Factors" in our Annual Report on Form 20-F for the fiscal year ended March 31, 2018, which is incorporated by reference into this prospectus supplement and the accompanying prospectus.

We are an “emerging growth company” under the U.S. Jumpstart Our Business Startups Act of 2012, and as such, may elect to comply with certain reduced public company reporting requirements.

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

The common shares offered by this prospectus supplement have not been and will not be qualified for sale under the securities laws of any province or territory of Canada or to any resident of Canada and may not be offered or sold, directly or indirectly, in Canada or to or for the account of any resident of Canada. This prospectus supplement and the accompanying prospectus have not been filed in respect of, and will not qualify, any distribution of these common shares in any province or territory of Canada. No common shares will be sold on the TSXV or on other trading markets in Canada as at the market distributions.

B. Riley FBR

The date of this prospectus supplement is February 14, 2019.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of a “shelf” registration statement on Form F-3 that we filed with the SEC, and is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of common shares and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated March 16, 2018, including the documents incorporated by reference into it, provides more general information. Generally, when we refer to this “prospectus,” we are referring to both parts of this document combined.

If there is any inconsistency between the information in this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date and that is incorporated by reference herein, the statement in the document having the later date modifies or supersedes the earlier statement.

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 were accurate 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.

Before investing in our securities, please carefully read both this prospectus supplement and the accompanying prospectus together with the documents incorporated by reference herein and therein, as listed under “Documents Incorporated by Reference,” and the additional information described below under “Where You Can Find More Information.”

You should rely only on the information contained in or incorporated by reference into this prospectus. We 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. The distribution or possession of this prospectus in or from certain jurisdictions may be restricted by law. This prospectus is not an offer to sell the securities and is not soliciting an offer to buy the securities in any jurisdiction where the offer or sale is not permitted or where the person making the offer or sale is not qualified to do so or to any person to whom it is not permitted to make such offer or sale. You should assume that the information contained in this prospectus is accurate only as of the date on the front cover of this prospectus supplement, or accompanying prospectus, as applicable, and the information incorporated by reference into this prospectus is accurate only as of the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since that date.

Other than in the United States, no action has been taken by us or B. Riley FBR that would permit a public offering of the securities offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The common shares offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

Owning common shares may subject you to tax consequences in the United States. This prospectus supplement or the accompanying prospectus may not describe these tax consequences fully. You should read the tax discussion in this prospectus supplement and consult your own tax advisor with respect to your own particular circumstances.

We own or have rights to trademarks, service marks or trade names that we use in connection with the operation of our business. In addition, our name, logo and website names and addresses are our service marks or trademarks. CaPre® is our registered trademark. The other trademarks, trade names and service marks appearing in this prospectus and the documents incorporated by reference into this prospectus supplement are the property of their respective owners. Solely for convenience, the trademarks, service marks, tradenames and copyrights referred to in this prospectus supplement are listed without the ©, ® and TM symbols, but we will assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors to these trademarks, service marks and tradenames.

Unless stated otherwise or the context otherwise requires, references in this prospectus supplement and the accompanying prospectus to “Acasti,” the “Company,” “we,” “us,” or “our” refer to Acasti Pharma Inc.

Unless stated otherwise or if the context otherwise requires, all references to dollar amounts in this prospectus supplement are references to Canadian dollars. References to “US\$” are to U.S. dollars and references to “CDN\$” and “\$” are to Canadian dollars. In this prospectus supplement, where applicable, and unless otherwise indicated, amounts are converted from Canadian dollars to U.S. dollars and vice versa by applying the daily average closing rate of exchange for conversion of one Canadian dollar to U.S. dollars as reported by the Bank of Canada on February 13, 2019, which was \$1.00 = US\$0.7553.

The consolidated financial statements incorporated by reference into this prospectus supplement are presented in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, including the documents incorporated by reference herein and therein, contain information that may be forward-looking statements within the meaning of U.S. federal securities laws. Forward-looking statements can be identified by the use of terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “intend,” “estimate,” “predict,” “potential,” “continue” or other similar expressions concerning matters that are not statements about the present or historical facts. Forward-looking statements in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference herein and therein include, among other things, information or statements about:

- our ability to conduct all required clinical and nonclinical trials for CaPre, including the timing and results of those trials;
- our strategy, future operations, prospects and the plans of our management;
- the design, regulatory plan, timeline, costs and results of our clinical and nonclinical trials for CaPre;
- the timing and outcome of our meetings and discussions with the U.S. Food and Drug Administration, or FDA;
- our planned regulatory filings for CaPre, and their timing;
- our expectation that our bridging study results will support our plan to get authorization from the FDA to use the 505(b)(2) pathway with new chemical entity, or NCE, status towards a New Drug Application, or NDA, approval in the United States;
- the timing and results from two competitor outcomes studies in patients with high triglycerides, or TGs, (blood levels between 200-499 mg/dL) and concomitantly taking a statin;
- the potential benefits and risks of CaPre as compared to other products in the pharmaceutical, medical food and natural health products markets;
- our estimates of the size of the potential market for CaPre, unmet medical needs in that market, the potential for market expansion, and the rate and degree of market acceptance of CaPre if it reaches commercialization, and our ability to serve that market;
- our anticipated marketing advantages and product differentiation of CaPre and its potential to become a best-in-class omega-3 therapeutic, or OM3, compound for the treatment of hypertriglyceridemia, or HTG;
- the potential to expand CaPre’s indication for the treatment of high TGs (200-499 mg/dL);
- the degree to which physicians would switch their patients to a product with CaPre’s target product profile;
- our strategy and ability to develop, commercialize and distribute CaPre in the United States and elsewhere;
- the manufacturing scale-up of CaPre beyond 20 tons per year and the related timing;
- our ability to strengthen our patent portfolio and other means of protecting our intellectual property rights, including our ability to obtain additional patent protection for CaPre;

- our expectation that following expiration of our license agreement with Neptune Technologies & Bioresources Inc., or Neptune, we will not require any license from third parties to support the commercialization of CaPre;
- the availability, consistency and sources of our raw materials, including krill oil;
- our expectation to be able to rely on third parties to manufacture CaPre whose manufacturing processes and facilities are in compliance with current good manufacturing practices, or cGMP;
- the potential for OM3s in other cardiometabolic medicine indications;
- our intention and ability to build a U.S. commercial organization and to successfully launch CaPre and compete in the U.S. market;
- our intention and ability to complete development and/or distribution partnerships to support the commercialization of CaPre outside of the United States, and to pursue strategic opportunities to provide capital and market access;
- our need for additional financing and our estimates regarding our future financing and capital requirements;
- our expectation regarding our financial performance, including our revenues, profitability, research and development, costs and expenses, gross margins, liquidity, capital resources, and capital expenditures; and
- our projected capital requirements to fund our anticipated expenses, including our research and development and general and administrative expenses, and capital expenditures.

In addition, the forward-looking statements in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference herein and therein are subject to a number of known and unknown risks, uncertainties and other factors, including those described in this prospectus supplement under the heading “Risk Factors,” many of which are beyond our control, that could cause our actual results and developments to differ materially from those that are disclosed in or implied by the forward-looking statements, including, among others:

- risks related to timing and possible difficulties, delays or failures in our planned TRILOGY Phase 3 program for CaPre;
- nonclinical and clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of CaPre;
- CaPre may not prove to be as safe and effective or as potent as we currently believe;
- our planned TRILOGY Phase 3 program may not produce positive results;
- our anticipated studies and submissions to the FDA may not occur as currently anticipated, or at all;
- the FDA could reject our 505(b)(2) regulatory pathway;
- outcome study data from two of our competitors in patients with high TGs may be negative, which could also negatively affect the market perception of CaPre;
- we may encounter difficulties, delays or failures in obtaining regulatory approvals for the initiation of clinical trials or to market CaPre;

- we may need to conduct additional future clinical trials for CaPre, the occurrence and success of which cannot be assured;
- CaPre may have unknown side effects;
- the FDA may refuse to approve CaPre, or place restrictions on our ability to commercialize CaPre;
- CaPre could be subject to extensive post-market obligations and continued regulatory review, which may result in significant additional expense and affect sales, marketing and profitability;
- we may fail to achieve our publicly announced milestones on time;
- we may encounter difficulties in completing the development and commercialization of CaPre;
- third parties we will rely upon to conduct our TRILOGY Phase 3 program for CaPre may not effectively fulfill their obligations to us, including complying with FDA requirements;
- there may be difficulties, delays, or failures in obtaining health care reimbursements for CaPre;
- recently enacted and future laws may increase the difficulty and cost for us to obtain marketing approval of and commercialize CaPre and affect the prices we can charge;
- new laws, regulatory requirements, and the continuing efforts of governmental and third-party payors to contain or reduce the costs of healthcare through various means could adversely affect our business;
- the market opportunity for, and demand and market acceptance of, CaPre may not be as strong as we anticipate;
- third parties that we will rely upon to manufacture, supply and distribute CaPre may not effectively fulfill their obligations to us, including complying with FDA requirements;
- there may not be an adequate supply of raw materials, including krill oil, in sufficient quantities and quality and to produce CaPre under cGMP standards;
- Neptune still has some influence with respect to matters submitted to our shareholders for approval;
- Neptune's interest may not align with those of us or our other shareholders;
- we may not be able to meet applicable regulatory standards for the manufacture of CaPre or scale-up our manufacturing successfully;
- we may not be able to produce clinical batches of CaPre in a timely manner or at all;
- as a company, we have limited sales, marketing and distribution experience;
- our patent applications may not result in issued patents, our issued patents may be circumvented or challenged and ultimately struck down, and we may not be able to successfully protect our trade secrets or other confidential proprietary information;
- we may face claims of infringement of third party intellectual property and other proprietary rights;
- we may face product liability claims and product recalls;

- we may face intense competition from other companies in the pharmaceutical, medical food and natural health product industries;
- we have a history of negative operating cash flow and may never become profitable or be able to sustain profitability;
- we have significant additional future capital needs and may not be able to raise additional financing required to fund further research and development, clinical studies, obtain regulatory approvals, build a commercial organization in the United States, and meet ongoing capital requirements to continue our current operations on commercially acceptable terms or at all;
- we may not be able to successfully compete in the U.S. market with competitors who are larger and have more resources than we do;
- we may acquire businesses or products or form strategic partnerships in the future that may not be successful;
- we may be unable to secure development and/or distribution partnerships to support the development and commercialization of CaPre outside the United States, provide development capital, or market access;
- we rely on the retention of key management and skilled scientific personnel; and
- general changes in economic and capital market conditions could adversely affect us.

All of the forward-looking statements in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein are qualified by this cautionary statement. There can be no guarantee that the results or developments that we anticipate will be realized or, even if substantially realized, that they will have the consequences or effects on our business, financial condition or results of operations that we anticipate. As a result, you should not place undue reliance on the forward-looking statements. Except as required by applicable law, we do not undertake to update or amend any forward-looking statements, whether as a result of new information, future events or otherwise. All forward-looking statements in this prospectus supplement are made as of the date of this prospectus supplement. Forward-looking statements made in the accompanying prospectus and the documents incorporated by reference therein are made as of the date of the original document and have not been updated by us, except as expressly provided for in this prospectus supplement.

SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement and the accompanying prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common shares. For a more complete understanding of our company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the information referred to under the heading “Risk Factors” in this prospectus supplement beginning on page S-11 and in the sections captioned “Item 3 – Key Information – Risk Factors” in our Annual Report on Form 20-F for the fiscal year ended March 31, 2018, which is incorporated by reference into this prospectus supplement and the accompanying prospectus, the other information incorporated by reference into this prospectus supplement and the accompanying prospectus, and the information included in any free writing prospectus that we have authorized for use in connection with this offering.

Our Company

We are a biopharmaceutical innovator focused on the research, development and commercialization of prescription drugs using OM3 fatty acids derived from krill oil. OM3 fatty acids have extensive clinical evidence of safety and efficacy in lowering TGs in patients with HTG. Our lead product candidate is CaPre, an OM3 phospholipid therapeutic, which we are developing initially for the treatment of severe HTG, a condition characterized by very high or severe levels of TGs in the bloodstream (≥ 500 mg/dL).

In accordance with a study published in 2009 in the Archives of Internal Medicine by Ford et al., it is estimated that three to four million people in the United States have severe HTG. Market research commissioned by us suggests there is a significant unmet medical need exists for an effective, safe and well-absorbing OM3 therapeutic that can also demonstrate a positive impact on the major blood lipids associated with cardiovascular disease risk. We believe that CaPre will address this unmet medical need if our Phase 3 results reproduce what we observed in our Phase 2 data. We initiated TRILOGY, our Phase 3 clinical program in North America during the second half of 2017 and started clinical site activation as planned at the end of 2017. As of the date of this prospectus supplement, patient enrollment has been substantially completed and randomization is ongoing. We also believe that potential exists to expand CaPre’s initial indication to the roughly 36 million patients with high TGs (blood levels between 200 – 499 mg/dL), although at least one additional clinical trial would likely be required to support FDA approval of a supplemental New Drug Application to expand CaPre’s indications to this segment. Data from our Phase 2 studies indicated that CaPre may also have a positive effect in diabetes and inflammatory diseases. Consequently, we may also seek to identify new potential indications for CaPre that may be appropriate for future studies and pipeline expansion. In addition, we may also seek to in-license other cardiometabolic drug candidates for drug development and commercialization.

In four clinical trials conducted to date, we saw the following consistent results with CaPre, and we are seeking to demonstrate similar safety and efficacy in our TRILOGY Phase 3 program:

- significant reduction of TGs and non-high density lipoprotein cholesterol (non-HDL-C) levels in the blood of patients with mild to severe HTG;
- no deleterious effect on low-density lipoprotein cholesterol (LDL-C), or “bad” cholesterol, with the potential to reduce LDL-C;
- potential to increase high-density lipoprotein cholesterol (HDL-C), or “good” cholesterol;
- good bioavailability (absorption by the body), even under fasting conditions;
- potential to decrease hemoglobin A1c, a biomarker of long-term glucose control;
- no significant food effect when taken with either low-fat or high-fat meals; and
- an overall safety profile similar to that demonstrated by currently marketed OM3s.

We believe that if we are able to reproduce these results in our TRILOGY Phase 3 program, we potentially could set CaPre apart from current FDA-approved OM3 treatment options, and it could give us a significant clinical and marketing advantage.

Corporate Information

We were incorporated on February 1, 2002 under Part 1A of the *Companies Act* (Québec) under the name “9113-0310 Québec Inc”. On August 7, 2008, pursuant to a Certificate of Amendment, we changed our name to “Acasti Pharma Inc.” and on February 14, 2011, the *Business Corporations Act* (Québec) came into effect and replaced the *Companies Act* (Québec). We are now governed by the *Business Corporations Act* (Québec).

Our principal executive offices are located at 545 Promenade du Centropolis, Suite 100, Laval, Québec, Canada H7T 0A3. Our telephone number is (450) 686-4555. Our corporate website is <http://www.acastipharma.com>. Information appearing on our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus.

THE OFFERING

The following summary contains basic information about our common shares and the offering and is not intended to be complete. It does not contain all of the information that may be important to you. For a more complete understanding of our common shares, you should read the section entitled “Description of Share Capital” in the accompanying prospectus.

Common shares offered by us	Common shares having an aggregate offering price of up to US\$30,000,000.
Manner of offering	<p>“At the market offering” that may be made from time to time through or to B. Riley FBR, as sales agent or principal. See “Plan of Distribution.”</p> <p>The common shares offered hereby have not been and will not be qualified for sale under the securities laws of any province or territory of Canada or to any resident of Canada and will not be offered or sold, directly or indirectly, in Canada or to or for the account of any resident of Canada. No common shares will be sold on the TSXV or on other trading markets in Canada as at the market distributions.</p>
Common shares to be outstanding after this offering	Up to 112,219,476 shares, assuming a sales price of US\$0.88 per share, which was the closing price of our common shares on NASDAQ on February 13, 2019. The actual number of shares issued will vary depending on the sales price under this offering.
Use of proceeds	We intend to use the net proceeds from this offering to support the NDA filing and approval of CaPre and commercial launch preparations and for working capital and general corporate purposes. See “Use of Proceeds.”
Risk factors	You should read the description of risks described in “Risk Factors” beginning on page S-11 of this prospectus supplement and those otherwise incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of material risks that prospective purchasers of our common shares should consider.
NASDAQ and TSXV ticker symbol	ACST

The number of common shares to be outstanding immediately after the completion of the offering is based on 78,128,567 common shares outstanding on February 13, 2019 and excludes the following:

- 4,250,011 common shares issuable upon the exercise of options issued to our directors, officers and employees, at a weighted-average exercise price of \$1.27 per common share;
- 1,052,630 common shares issuable upon conversion of debentures at an exercise price of \$1.90 per common share;
- 1,904,034 common shares issuable upon the exercise of warrants at an exercise price of \$2.15 per common share;
- 495,050 common shares issuable upon the exercise of underwriter warrants at an exercise price of US\$1.2625 per common share;
- 9,801,861 common shares issuable upon the exercise of warrants at an exercise price of US\$1.26 per common share;

- 547,975 common shares issuable upon the exercise of underwriter warrants at an exercise price of \$1.05 per common share; and
- 10,188,100 common shares issuable upon the exercise of warrants at an exercise price of \$1.31 per common share.

RISK FACTORS

Investing in our common shares involves risk. Before making any investment decision, you should carefully read the risk factors set forth below, under the caption “Risk Factors” in the accompanying prospectus and under the caption “Item 3 – Key Information – D. Risk Factors” in our Annual Report on Form 20-F for the fiscal year ended March 31, 2018, and other documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus. It is not possible to predict or identify all such risks. Consequently, we could also be affected by additional factors that are not presently known to us or that we currently consider to be immaterial to us.

The risks we have identified and the risks that remain unknown could materially affect our business, results of operation or financial condition and affect the value of our common shares. You could lose all or part of your investment.

Sales of a substantial number of our common shares, or the perception that such sales might occur, could adversely affect the trading price of our common shares.

We may issue up to US\$30 million of common shares from time to time in this offering. Sales of a substantial number of our common shares, or the perception that such sales might occur, could adversely affect the trading price of our common shares. We cannot predict the effect, if any, that market sales of those common shares or the availability of those common shares for sale will have on the market price of our common shares. In addition, the market price of our common shares could fall as a result of re-sales of any of these common shares due to an increased number of shares available for sale in the market.

You may experience immediate dilution in the book value per share of the common shares you purchase.

Because the price per share of our common shares being offered may be substantially higher than the book value per share of our common shares, you may experience substantial dilution in the net tangible book value of the common shares you purchase in this offering. Assuming that an aggregate of 34,090,909 common shares are sold at a price of US\$0.88 per share pursuant to this prospectus supplement, which was the last reported sale price of our common shares on NASDAQ on February 13, 2019, and based on the net tangible book value of the common shares of \$0.46 per share as of December 31, 2018, if you purchase common shares in this offering, you will experience dilution of \$0.51 per share in the net tangible book value of the common shares.

The market price of our common shares may be affected by low volume.

Our common shares have a relatively low average daily volume. The average daily trading volume during the 90 days prior to February 13, 2019 was approximately 509,284 shares on NASDAQ and approximately 132,964 shares on the TSXV. Without a significantly larger average trading volume, our common shares will be less liquid than the common shares of companies with higher trading volume. As a result, the trading prices for our common shares may be more volatile.

It is not possible to predict the actual number of shares we will sell under the sales agreement, or the gross proceeds resulting from those sales.

Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a placement notice to the sales agent at any time throughout the term of the sales agreement. The number of shares that are sold through the sales agent after delivering a placement notice will fluctuate based on a number of factors, including the market price of our common shares during the sales period, the limits we set with the sales agent in any applicable placement notice, and the demand for our common shares during the sales period. Because the price per share of each share sold will fluctuate during the sales period, it is not currently possible to predict the number of shares that will be sold or the gross proceeds to be raised in connection with those sales.

Our common shares offered hereby may be sold in “at the market offerings,” and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different levels of dilution and different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold in this offering. In addition, there is no minimum or maximum sales price for shares to be sold in this offering. Investors may experience a decline in the value of the shares they purchase in this offering as a result of sales made at prices lower than the prices they paid.

There is a significant risk that we may be classified as a PFIC for U.S. federal income tax purposes.

Potential investors in our common shares who are U.S. holders should be aware that, based on our most recent financial statements and projections and given uncertainty regarding the composition of our future income and assets, there is a significant risk that we may be classified as a “passive foreign investment company” or “PFIC” for our current taxable year and possibly subsequent years. If we are a PFIC for any year during a U.S. holder’s holding period of the common shares acquired pursuant to this prospectus, then such U.S. taxpayer generally will be required to treat any gain realized upon a disposition of such common shares or any so-called “excess distribution” received on such common shares, as ordinary income (with a portion subject to tax at the highest rate in effect), and to pay an interest charge on a portion of such gain or excess distribution. In certain circumstances, the sum of the tax and the interest charge may exceed the total amount of proceeds realized on the disposition, or the amount of excess distribution received, by the U.S. holder. Subject to certain limitations, a timely and effective QEF Election under Section 1295 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, or a Mark-to-Market election under Section 1296 of the Code may be made with respect to the common shares. A U.S. holder who makes a timely and effective QEF Election generally must report on a current basis its share of our net capital gain and ordinary earnings for any year in which we are a PFIC, whether or not we distribute any amounts to our shareholders. A U.S. holder who makes the Mark-to-Market Election generally must include as ordinary income each year the excess of the fair market value of their common shares over the holder’s basis therein. This paragraph is qualified in its entirety by the discussion below under the heading “Certain U.S. Federal Income Tax Considerations—U.S. Federal Income Tax Considerations of the Acquisition, Ownership, and Disposition of Common Shares—Passive Foreign Investment Company Rules”. Each potential investor who is a U.S. holder should consult its own tax advisor regarding the U.S. federal, U.S. state and local, and non-U.S. tax consequences of the acquisition, ownership, and disposition of common shares acquired pursuant to this prospectus, the U.S. federal tax consequences of the PFIC rules, and the availability of any election that may be available to the holder to mitigate adverse U.S. federal income tax consequences of holding shares in a PFIC.

We have broad discretion to determine how to use the proceeds raised in this offering, and we may not use the proceeds effectively.

We intend to use the net proceeds from this offering to support the NDA filing and approval of CaPre and commercial launch preparations and for working capital and general corporate purposes. Our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways with which you may not agree or that do not yield a favorable return. Accordingly, you will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity as part of your investment decision to assess whether the proceeds are being used appropriately. Our needs may change as the business and the industry that we address evolves. It is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

USE OF PROCEEDS

The amount of net proceeds from this offering will depend upon the number of shares of our common shares sold and the market price at which they are sold after deduction of commissions or discounts and offering expenses payable by us. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement with B. Riley FBR.

We currently anticipate using the net proceeds from the sale of our common shares offered by this prospectus supplement, if any, to support the NDA filing and approval of CaPre and commercial launch preparations and for working capital and general corporate purposes. We have not allocated any portion of the net proceeds for any particular use as of the date of this prospectus supplement. The net proceeds may be invested temporarily until they are used for their stated purpose.

The occurrence of unforeseen events or changed business conditions, however, could result in the application of the net proceeds from this offering in a manner other than as described in this prospectus supplement. As a result, our management will retain broad discretion over the use of the net proceeds from any sale of our common shares offered hereby.

DILUTION

If you invest in our common shares, your interest will be diluted immediately to the extent of the difference between the public offering price per common share and the adjusted net tangible book value per common share after this offering.

The net tangible book value of our common shares as of December 31, 2018 was approximately \$35.7 million, or approximately \$0.46 per common share. Net tangible book value per common share represents the amount of our total assets, excluding intangible assets, less total liabilities, excluding derivative warrant liabilities, divided by the total number of our common shares outstanding. Dilution per common share to new investors represents the difference between the amount per share paid by purchasers for each common share in this offering and the net tangible book value per common share immediately following the completion of this offering.

After giving effect to the sale of our common shares pursuant to this prospectus supplement in the aggregate amount of US\$30 million at an assumed price of US\$0.88 per common share, which was the last reported sale price of our common shares on NASDAQ on February 13, 2019, and after deducting commissions (estimated at 4.0% of the gross proceeds for the initial US\$10 million and 3.0% of the gross proceeds for the subsequent US\$20 million) and estimated offering expenses payable by us (estimated at US\$140,000), our as-adjusted net tangible book value as of December 31, 2018 would have been approximately \$73.9 million, or approximately \$0.66 per common share. This represents an immediate increase in net tangible book value of approximately \$0.20 per common share to our existing shareholders and an immediate dilution in as-adjusted net tangible book value of approximately \$0.51 per common share to purchasers of our common shares in this offering, as illustrated by the following table:

Assumed price per common share		\$ 1.17
Net tangible book value per share as of December 31, 2018	\$ 0.46	
Increase per common share attributable to this offering	<u>\$ 0.20</u>	
As-adjusted net tangible book value per share after giving effect to this offering		<u>\$ 0.66</u>
Dilution per common share to new investors		<u>\$ 0.51</u>

For purposes of the foregoing discussion, the assumed price of US\$0.88 per share has been converted into Canadian dollars based on the daily average exchange rate for one U.S. dollar expressed as one Canadian dollar, as quoted by the Bank of Canada of US\$1.00 = \$1.324, as of February 13, 2019.

Our common shares sold in this offering, if any, will be sold from time to time at various prices. The as adjusted information is illustrative only and will adjust based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time our common shares are sold pursuant to this prospectus supplement.

Except as otherwise indicated herein, the foregoing discussion and table are calculated based on 78,128,567 common shares that were outstanding on December 31, 2018 and exclude the following:

- 4,250,011 common shares issuable upon the exercise of options issued to our directors, officers and employees, at a weighted-average exercise price of \$1.27 per common share;
- 1,052,630 common shares issuable upon conversion of debentures at an exercise price of \$1.90 per common share;
- 1,904,034 common shares issuable upon the exercise of warrants at an exercise price of \$2.15 per common share;
- 495,050 common shares issuable upon the exercise of underwriter warrants at an exercise price of US\$1.2625 per common share;

- 9,801,861 common shares issuable upon the exercise of warrants at an exercise price of US\$1.26 per common share;
- 547,975 common shares issuable upon the exercise of underwriter warrants at an exercise price of \$1.05 per common share; and
- 10,188,100 common shares issuable upon the exercise of warrants at an exercise price of \$1.31 per common share.

To the extent that any options or warrants are exercised, new options are issued under our equity incentive plans or we otherwise issue additional common shares in the future, there will be further dilution to new investors.

PLAN OF DISTRIBUTION

We have entered into a sales agreement with B. Riley FBR on February 14, 2019, under which we may offer and sell our common shares having an aggregate offering price of up to US\$30,000,000 from time to time through or to B. Riley FBR as sales agent or principal. Sales of our common shares, if any, under this prospectus supplement may be made in transactions that are deemed to be “at the market offerings” as defined in Rule 415 under the Securities Act.

Each time we wish to issue and sell our common shares under the sales agreement, we will notify B. Riley FBR of the number or dollar value of shares to be issued, the dates on which such sales are anticipated to be made, any minimum price below which sales may not be made and other sales parameters as we deem appropriate. Once we have so instructed B. Riley FBR, unless B. Riley FBR declines to accept the terms of the notice, B. Riley FBR has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of B. Riley FBR under the sales agreement to sell our common shares are subject to a number of conditions that we must meet.

We will pay B. Riley FBR commissions for its services in acting as agent in the sale of our common shares at a commission rate equal to 4.0% of the gross sale price per share sold for up to and including US\$10 million of the gross proceeds and 3.0% of the gross sale price per share sold for gross proceeds in excess of US\$10 million.

We have also agreed to reimburse B. Riley FBR for its reasonable out-of-pocket expenses, including attorney’s fees, in an amount not to exceed US\$50,000. We estimate that the total expenses for the offering, excluding compensation payable to B. Riley FBR under the sales agreement, will be approximately US\$140,000.

Settlement for sales of our common shares will occur on the second business day following the date on which any sales are made, or on some other date that is agreed upon by us and B. Riley FBR in connection with a particular transaction, in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sale of our common shares on our behalf, B. Riley FBR will be deemed to be an underwriter within the meaning of the Securities Act, and its compensation as sales agent will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to B. Riley FBR against certain civil liabilities, including liabilities under the Securities Act.

The offering pursuant to the sales agreement will terminate upon the earlier of (1) the issuance and sale of all of our common shares subject to the sales agreement; and (2) the termination of the sales agreement as permitted therein.

B. Riley FBR and its affiliates may in the future provide various investment banking and other financial services for us and our affiliates, for which services it may in the future receive customary fees.

To the extent required by Regulation M, B. Riley FBR will not engage in any market making activities involving our common shares while the offering is ongoing under this prospectus supplement. This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement is furnished as an exhibit to our Report on Form 6-K and is incorporated by reference into this prospectus supplement.

Notwithstanding the foregoing, the common shares offered by this prospectus supplement and the accompanying prospectus have not been and will not be qualified for sale under the securities laws of any province or territory of Canada or to any resident of Canada and may not be offered or sold, directly or indirectly, in Canada or to or for the account of any resident of Canada. This prospectus supplement and the accompanying prospectus have not been filed in respect of, and will not qualify, any distribution of these securities in any province or territory of Canada. No common shares will be sold on the TSXV or on other trading markets in Canada as at the market distributions.

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of certain U.S. federal income tax considerations arising from and relating to the acquisition, ownership, and disposition of our common shares to a U.S. Holder (as defined below) who acquires such common shares pursuant to this prospectus supplement. This discussion does not address the tax consequences to a subsequent purchaser of our common shares. This summary provides only general information and does not purport to be a complete analysis or listing of all potential U.S. federal income tax consequences that may apply to a U.S. Holder as a result of the acquisition, ownership, and disposition of our common shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences applicable to that U.S. Holder. 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. Each U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. state and local, and non-U.S. tax consequences arising from or relating to the acquisition, ownership, and disposition of our common shares.

No legal opinion from U.S. legal counsel or ruling from the Internal Revenue Service, or IRS, has been requested, or will be obtained, regarding the U.S. federal income tax consequences to U.S. Holders of the acquisition, ownership, and disposition of our common shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the positions taken in this summary.

Scope of this Disclosure

Authorities

This summary is based on the Code, U.S. Treasury Regulations promulgated thereunder (whether final, temporary or proposed), published IRS rulings, judicial decisions, published administrative positions of the IRS, and 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 Treaty), in each case, as in effect as of the date of this prospectus supplement. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive basis. Unless otherwise discussed, this summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation.

U.S. Holders

For purposes of this summary, a “U.S. Holder” is a beneficial owner of common shares that, for U.S. federal income tax purposes, is (a) an individual who is a citizen or resident of the United States, (b) a corporation, or other entity classified as a corporation for U.S. federal income tax purposes, that is created or organized in or under the laws of the U.S., any state in the United States or the District of Columbia, (c) an estate if the income of such estate is subject to U.S. federal income tax regardless of the source of such income, or (d) a trust if (i) such trust has validly elected to be treated as a U.S. person for U.S. federal income tax purposes or (ii) a U.S. court is able to exercise primary supervision over the administration of such trust and one or more U.S. persons have the authority to control all substantial decisions of such trust.

U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax consequences applicable to U.S. Holders that are subject to special provisions under the Code, including, but not limited to, the following U.S. Holders: (a) U.S. Holders that are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax deferred accounts; (b) U.S. Holders that are financial institutions, insurance companies, real estate investment trusts, or regulated investment companies; (c) U.S. Holders that are dealers in securities or currencies or U.S. Holders that are traders in securities that elect to apply a mark-to-market accounting method; (d) U.S. Holders that have a “functional currency” other than the U.S. dollar; (e) U.S. Holders subject to the alternative minimum tax provisions of the Code; (f) U.S. Holders that own common shares as part of a straddle, hedging transaction, conversion transaction, integrated transaction, constructive sale, or other arrangement involving more than one position; (g) U.S. Holders that acquired common shares through the exercise of employee stock options or otherwise as compensation for services; (h) U.S. Holders that hold common shares other than as a capital asset within the meaning of Section 1221 of the Code; (i) U.S. Holders that beneficially own (directly, indirectly or by attribution) 10% or more of our equity securities (by vote or value); and (j) U.S. expatriates. U.S. Holders that are subject to special provisions under the Code, including U.S. Holders described above, should consult their own tax advisor regarding the U.S. federal, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences arising from and relating to the acquisition, ownership, and disposition of the common shares.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds common shares, the U.S. federal income tax consequences to that partnership and the partners of that partnership generally will depend on the activities of the partnership and the status of the partners. Partners of entities that are classified as partnerships for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership and disposition of the common shares.

Tax Consequences Other than U.S. Federal Income Tax Consequences Not Addressed

This summary does not address the U.S. estate and gift, alternative minimum, state, local or non-U.S. tax consequences to U.S. Holders of the acquisition, ownership, and disposition of our common shares. Each U.S. Holder should consult its own tax advisor regarding the U.S. estate and gift, alternative minimum, state, local and non-U.S. tax consequences arising from and relating to the acquisition, ownership, and disposition of our common shares.

U.S. Federal Income Tax Considerations of the Acquisition, Ownership, and Disposition of Common Shares

Distributions on Common Shares

Subject to the discussion under “—Passive Foreign Investment Company Rules” below, a U.S. Holder that receives a distribution, including a constructive distribution or a taxable stock distribution, with respect to the common shares generally will be required to include the amount of that distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of our current or accumulated “earnings and profits” (as computed for U.S. federal income tax purposes). To the extent that a distribution exceeds our current and accumulated “earnings and profits”, the excess amount will be treated (a) first, as a tax-free return of capital to the extent of a U.S. Holder’s adjusted tax basis in the common shares with respect to which the distribution is made (resulting in a corresponding reduction in the tax basis of those common shares) and, (b) thereafter, as gain from the sale or exchange of those common shares (see the more detailed discussion at “—Disposition of Common Shares” below). We do not intend to calculate our current or accumulated earnings and profits for U.S. federal income tax purposes and, therefore, will not be able to provide U.S. Holders with that information. U.S. Holders should therefore assume that any distribution by us with respect to our common shares will constitute a dividend. However, U.S. Holders should consult their own tax advisors regarding whether distributions from us should be treated as dividends for U.S. federal income tax purposes. Dividends paid on our common shares generally will not be eligible for the “dividends received deduction” allowed to corporations under the Code with respect to dividends received from U.S. corporations.

A dividend paid by us generally will be taxed at the preferential tax rates applicable to long-term capital gains if, among other requirements, (a) we are a “qualified foreign corporation” (as defined below), (b) the U.S. Holder receiving the dividend is an individual, estate, or trust, and (c) the dividend is paid on common shares that have been held by the U.S. Holder for at least 61 days during the 121-day period beginning 60 days before the “ex-dividend date” (i.e., the first date that a purchaser of the common shares will not be entitled to receive the dividend).

For purposes of the rules described in the preceding paragraph, we generally will be a “qualified foreign corporation”, or a QFC, if (a) we are eligible for the benefits of the Canada-U.S. Tax Treaty, or (b) our common shares are readily tradable on an established securities market in the United States, within the meaning provided in the Code. However, even if we satisfy one or more of the requirements, we will not be treated as a QFC if we are classified as a PFIC (as discussed below) for the taxable year during which we pay the applicable dividend or for the preceding taxable year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of those rules to them in their particular circumstances. Even if we satisfy one or more of the requirements, as noted below, there can be no assurance that we will not be a PFIC in the current taxable year, or become a PFIC in the future. Thus, there can be no assurance that we will qualify as a QFC.

Disposition of Common Shares

Subject to the discussion under “—Passive Foreign Investment Company Rules” below, a U.S. Holder will recognize gain or loss on the sale or other taxable disposition of common shares (that is treated as a sale or exchange for U.S. federal income tax purposes) equal to the difference, if any, between (a) the U.S. dollar value of the amount realized on the date of the sale or disposition and (b) the U.S. Holder’s adjusted tax basis (determined in U.S. dollars) in the common shares sold or otherwise disposed of. Any such gain or loss generally will be capital gain or loss, which will be long-term capital gain or loss if the common shares are held for more than one year. Each U.S. Holder should consult its own tax advisor as to the tax treatment of dispositions of common shares in exchange for Canadian dollars.

Preferential tax rates apply to long-term capital gains of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gains of a U.S. Holder that is a corporation. Deductions for capital losses are subject to complex limitations.

Passive Foreign Investment Company Rules

If we are or become a PFIC, the preceding sections of this summary may not describe the U.S. federal income tax consequences to U.S. Holders of the acquisition, ownership, and disposition of our common shares.

Passive Foreign Investment Company Status.

Special, generally unfavorable, rules apply to the ownership and disposition of the stock of a PFIC. For U.S. federal income tax purposes, a non-U.S. corporation is classified as a PFIC for each taxable year in which either:

- at least 75% of its gross income is “passive” income (referred to as the “income test”); or
- at least 50% of the average value of its assets is attributable to assets that produce passive income or are held for the production of passive income (referred to as the “asset test”).

Passive income generally includes the following types of income:

- dividends, royalties, rents, annuities, interest, and income equivalent to interest; and
- net gains from the sale or exchange of property that gives rise to dividends, interest, royalties, rents, or annuities and certain gains from the commodities transactions.

In determining whether we are a PFIC, we will be required to take into account a pro rata portion of the income and assets of each corporation in which we own, directly or indirectly, at least 25% by value.

As described above, PFIC status of a non-U.S. corporation for a taxable year depends on the relative values of certain categories of assets and the relative amount of certain kinds of income. Therefore, our status as a PFIC for any given taxable year depends upon the financial results for such year and upon relative valuations, which are subject to change and beyond our ability to predict or control. Based on our most recent financial statements and projections and given uncertainty regarding the composition of our future income and assets, there is a significant risk that we may be classified as a PFIC for our current taxable year and possibly subsequent years. However, PFIC status is fundamentally factual in nature, depends on the application of complex U.S. federal income tax rules (which are subject to differing interpretations), generally cannot be determined until the close of the taxable year in question and is determined annually. Accordingly, there can be no assurance that we will not be a PFIC in our current taxable year or subsequent years. The PFIC rules are complex, and each U.S. Holder should consult its tax advisor regarding the application of the PFIC rules to us.

Default PFIC Rules Under Section 1291 of the Code.

Generally, if we are or have been treated as a PFIC for any taxable year during a U.S. Holder's holding period of common shares, subject to the special rules described below applicable to a U.S. Holder who makes a Mark-to-Market Election or a QEF Election (each as defined below), any "excess distribution" with respect to the common shares would be allocated ratably over the U.S. Holder's holding period. The amounts allocated to the taxable year of the excess distribution and to any year before we became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for individuals or corporations in that taxable year, as appropriate, and an interest charge would be imposed on the amount allocated to that taxable year. Distributions made in respect of common shares during a taxable year will be excess distributions to the extent they exceed 125% of the average of the annual distributions on common shares received by the U.S. Holder during the preceding three taxable years or the U.S. Holder's holding period, whichever is shorter. In addition, dividends generally will not be qualified dividend income if we are a PFIC in the taxable year of payment or the preceding year.

Generally, if we are treated as a PFIC for any taxable year during which a U.S. Holder owns common shares, any gain on the disposition of the common shares would be treated as an excess distribution and would be allocated ratably over the U.S. Holder's holding period and subject to taxation in the same manner as described in the preceding paragraph, and would not be eligible for the preferential long-term capital gains rate.

Certain elections (including the Mark-to-Market Election and the QEF Election, as defined and discussed below) may sometimes be used to mitigate the adverse impact of the PFIC rules on U.S. Holders, but these elections may accelerate the recognition of taxable income and have other adverse results.

U.S. HOLDERS ARE URGED TO CONSULT THEIR TAX ADVISORS REGARDING THE POSSIBLE APPLICABILITY OF THE PFIC RULES TO SHARES ACQUIRED PURSUANT TO THIS PROSPECTUS SUPPLEMENT, AND THE AVAILABILITY OF MAKING A QEF OR MARK-TO-MARKET ELECTION TO MITIGATE ADVERSE U.S. TAX CONSEQUENCES OF HOLDING SHARES OF A PFIC.

QEF Election.

A U.S. Holder of common shares in a PFIC generally would not be subject to the PFIC rules discussed above if the U.S. Holder had made a timely and effective election (a "QEF Election") to treat us as a "qualified electing fund" (a "QEF"). Instead, such U.S. Holder would be subject to U.S. federal income tax on its *pro rata* share of our (i) net capital gain, which would be taxed as long-term capital gain to such U.S. Holder, and (ii) ordinary earnings, which would be taxed as ordinary income to such U.S. Holder, in each case regardless of whether such amounts are actually distributed to such U.S. Holder. However, a U.S. Holder that makes a QEF Election may, subject to certain limitations, elect to defer payment of current U.S. federal income tax on such amounts, subject to an interest charge. If such U.S. Holder is not a corporation, any such interest paid will be treated as "personal interest," which is not deductible.

A U.S. Holder that makes a timely and effective QEF Election generally (a) may receive a tax-free distribution from us to the extent that such distribution represents our "earnings and profits" that were previously included in income by such U.S. Holder because of such QEF Election and (b) will adjust such U.S. Holder's tax basis in the common shares to reflect the amount included in income or allowed as a tax-free distribution because of such QEF Election. In addition, for U.S. federal income tax purposes, a U.S. Holder that makes a timely QEF Election generally will recognize capital gain or loss on the sale or other taxable disposition of the common shares.

A QEF Election will be treated as "timely" if such QEF Election is made for the first taxable year in the U.S. Holder's holding period for the common shares in which we are a PFIC. A U.S. Holder may make a timely QEF election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such first year. If a U.S. Holder makes a QEF Election after the first taxable year in the U.S. Holder's holding period for the common shares in which we are a PFIC, then, in addition to filing the QEF Election documents, a U.S. Holder may elect to recognize gain (which will be taxed under the rules discussed under "*Default PFIC Rules Under Section 1291 of the Code*") as if the common shares were sold on the qualification date. The "qualification date" is the first day of the first taxable year in which we are a QEF with respect to such U.S. Holder. The election to recognize such gain can only be made if such U.S. Holder's holding period for the common shares includes the qualification date. By electing to recognize such gain, such U.S. Holder will be deemed to have made a timely QEF Election. In addition, under very limited circumstances, it is possible that a U.S. Holder might make a retroactive QEF Election if such U.S. Holder failed to file the QEF Election documents in a timely manner. If a U.S. Holder fails to make a QEF Election for the first taxable year in the U.S. Holder's holding period for the common shares in which we are a PFIC and does not elect to recognize gain as if the common shares were sold on the qualification date, such holder will not be treated as having made a "timely" QEF election and will continue to be subject to the special adverse taxation rules discussed above under "*Default PFIC Rules Under Section 1291 of the Code*".

A QEF Election will apply to the taxable year for which such QEF election is made and to all subsequent taxable years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election. If a U.S. Holder makes a QEF Election and, in a subsequent taxable year, we cease to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those taxable years in which we are not a PFIC. Accordingly, if we become a PFIC in another subsequent taxable year, the QEF Election will be effective and the U.S. Holder will be subject to the rules described above during any such subsequent taxable year in which we qualify as a PFIC.

A U.S. Holder cannot make and maintain a valid QEF Election unless we provide certain U.S. tax information necessary to make such an election. On an annual basis, we intend to use commercially reasonable efforts to make available to U.S. Holders that acquire common shares pursuant to this prospectus supplement, upon their written request (a) timely information as to our status as a PFIC, and (b) for each year in which we are a PFIC, information and documentation that a U.S. Holder making a QEF Election with respect to us is required to obtain for U.S. federal income tax purposes. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a QEF Election with respect to us.

Mark-to-Market Election.

A U.S. Holder of common shares in a PFIC would not be subject to the PFIC rules discussed above under “—Default PFIC Rules Under Section 1291 of the Code” if the U.S. Holder had made a timely and effective election to mark the PFIC common shares to market (a “Mark-to-Market Election”).

A U.S. Holder may make a Mark-to-Market Election with respect to the common shares only if such shares are marketable stock. Such shares generally will be “marketable stock” if they are regularly traded on a “qualified exchange,” which is defined as (a) a national securities exchange that is registered with the Securities and Exchange Commission, (b) the national market system established pursuant to section 11A of the Exchange Act of 1934, or (c) a non-U.S. securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that (i) such non-U.S. exchange has trading volume, listing, financial disclosure, surveillance, and other requirements, and the laws of the country in which such non-U.S. exchange is located, together with the rules of such non-U.S. exchange, ensure that such requirements are actually enforced and (ii) the rules of such non-U.S. exchange ensure active trading of listed stocks. Our common shares will generally be treated as “regularly traded” in any calendar year in which more than a *de minimis* quantity of common shares is traded on a qualified exchange for at least 15 days during each calendar quarter. Each U.S. Holder should consult its own tax advisor with respect to the availability of a Mark-to-Market Election with respect to the common shares.

In general, a U.S. Holder that makes a timely Mark-to-Market Election with respect to the common shares will include in ordinary income, for each taxable year in which we are a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the common shares as of the close of such taxable year over (b) such U.S. Holder’s tax basis in such shares. A U.S. Holder that makes a Mark-to-Market Election will be allowed a deduction in an amount equal to the lesser of (a) the excess, if any, of (i) such U.S. Holder’s adjusted tax basis in the common shares over (ii) the fair market value of such shares as of the close of such taxable year or (b) the excess, if any, of (i) the amount included in ordinary income because of such Mark-to-Market Election for prior taxable years over (ii) the amount allowed as a deduction because of such Mark-to-Market Election for prior taxable years. If a U.S. Holder makes a Mark-to-Market Election after the first taxable year in which we are a PFIC and such U.S. Holder has not made a timely QEF Election with respect to us, the PFIC rules described above under “—Default PFIC Rules Under Section 1291 of the Code” will apply to certain dispositions of, and distributions on, the common shares, and the U.S. Holder’s mark-to-market income for the year of the election. If we were to cease being a PFIC, a U.S. Holder that marked its common shares to market would not include mark-to-market gain or loss with respect to its common shares for any taxable year that we were not a PFIC.

A U.S. Holder that makes a Mark-to-Market Election generally will also adjust such U.S. Holder's tax basis in his common shares to reflect the amount included in gross income or allowed as a deduction because of such Mark-to-Market Election. In addition, upon a sale or other taxable disposition of the common shares subject to a Mark-to-Market Election, any gain or loss on such disposition will be ordinary income or loss (to the extent that such loss does not to exceed the excess, if any, of (a) the amount included in ordinary income because of such Mark-to-Market Election for prior taxable years over (b) the amount allowed as a deduction because of such Mark-to-Market Election for prior taxable years). A Mark-to-Market Election applies to the taxable year in which such Mark-to-Market Election is made and to each subsequent taxable year, unless the common shares cease to be "marketable stock" or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a Mark-to-Market Election with respect to the common shares.

Reporting. If we were to be treated as a PFIC in any taxable year, a U.S. Holder will generally be required to file an annual report with the IRS containing such information as the U.S. Treasury Department may require.

Each U.S. Holder should consult its own tax advisor regarding our potential status as a PFIC, the possible effect of the PFIC rules to such holder and information reporting required if we were a PFIC, as well as the availability of any election that may be available to the holder to mitigate adverse U.S. federal income tax consequences of holding shares in a PFIC.

Receipt of Foreign Currency

The amount of a distribution paid in Canadian dollars or Canadian dollar proceeds received on the sale or other taxable disposition of common shares will generally be equal to the U.S. dollar value of the currency on the date of receipt. If any Canadian dollars received with respect to the common shares are later converted into U.S. dollars, U.S. Holders may realize gain or loss on the conversion. Any gain or loss generally will be treated as ordinary income or loss and generally will be from sources within the United States for U.S. foreign tax credit purposes. Each U.S. Holder should consult its own tax advisor concerning the possibility of foreign currency gain or loss if any such currency is not converted into U.S. dollars on the date of receipt.

Foreign Tax Credit

Subject to certain limitations, a U.S. Holder who pays (whether directly or through withholding) Canadian or other non-U.S. income tax with respect to the common shares may be entitled, at the election of the U.S. Holder, to receive either a deduction or a credit for Canadian or other non-U.S. income tax paid. Dividends paid on common shares generally will constitute income from sources outside the United States. The foreign tax credit rules (including the limitations with respect thereto) are complex, and each U.S. Holder should consult its own tax advisor regarding the foreign tax credit rules, having regard to such holder's particular circumstances.

Information Reporting; Backup Withholding

Generally, information reporting and backup withholding will apply to distributions on, and the payment of proceeds from the sale or other taxable disposition of, the common shares unless (i) the U.S. Holder is a corporation or other exempt entity, or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that the U.S. Holder is not subject to backup withholding.

Backup withholding is not an additional tax. Any amount withheld generally will be creditable against a U.S. Holder's U.S. federal income tax liability or refundable to the extent that it exceeds such liability provided the required information is provided to the IRS in a timely manner.

In addition, certain categories of U.S. Holders must file information returns with respect to their investment in a non-U.S. corporation. For example, certain U.S. Holders must file IRS Form 8938 with respect to certain "specified foreign financial assets" (such as the common shares) with an aggregate value in excess of US\$50,000 (and, in some circumstances, a higher threshold). Failure to do so could result in substantial penalties and in the extension of the statute of limitations with respect to such holder's U.S. federal income tax returns. Each U.S. Holder should consult its own tax advisor regarding application of the information reporting and backup withholding rules to it in connection with an investment in our common shares.

Medicare Contribution Tax

U.S. Holders that are individuals, estates or certain trusts generally will be subject to a 3.8% Medicare contribution tax on, among other things, dividends on, and capital gains from the sale or other taxable disposition of, common shares, subject to certain limitations and exceptions. Each U.S. Holder should consult its own tax advisor regarding possible application of this additional tax to income earned in connection with an investment in our common shares.

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

The following is, as of the date hereof, a summary of the principal Canadian federal income tax considerations generally applicable under the Income Tax Act (Canada) and the regulations promulgated thereunder (collectively the “Tax Act”), to a purchaser who acquires, as beneficial owner, the offered shares under this offering, and who, for purposes of the Tax Act and at all relevant times, (i) is not, and is not deemed to be, resident in Canada, (ii) holds the offered shares as capital property, (iii) deals at arm’s length with, and is not affiliated with, Acasti or B. Riley FBR, and (iv) does not use or hold and will not be deemed to use or hold, the offered shares in a business carried on in Canada (a “Non-Resident Holder”). Special rules, which are not discussed in this summary, may apply to an insurer that carries on an insurance business in Canada and elsewhere. Such Non-Resident Holders should consult their own tax advisors.

This summary is based upon the provisions of the Tax Act in force as of the date hereof, all specific proposals to amend the Tax Act that have been publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the “Proposed Amendments”), the Canada-United States Tax Convention (1980), as amended (the “Canada-U.S. Tax Treaty”), and an understanding of the current administrative policies and assessing practices of the Canada Revenue Agency (the “CRA”), published in writing by it prior to the date hereof. This summary assumes the Proposed Amendments will be enacted in the form proposed. However, no assurance can be given that the Proposed Amendments will be enacted in their current form, or at all. This summary is not exhaustive of all possible Canadian federal income tax considerations and, except for the Proposed Amendments, does not take into account or anticipate any changes in the law or any changes in the CRA’s administrative policies or assessing practices, whether by legislative, governmental or judicial action or decision, nor does it take into account or anticipate any other federal or any provincial, territorial or foreign tax considerations, which may differ significantly from those discussed herein.

This summary is not applicable to a Non-Resident Holder who makes or has made a “functional currency” reporting election; or that has entered or enters into a “derivative forward agreement” with respect to the offered shares (each as defined in the Tax Act). Any such Non-Resident Holder should consult its own tax advisor with respect to an investment in the offered shares. This summary is of a general nature only and is not intended to be, nor should it be construed to be, legal or tax advice to any prospective purchaser or holder of the offered shares, and no representations with respect to the income tax consequences to any prospective purchaser or holder are made. Consequently, prospective purchasers or holders of the offered shares should consult their own tax advisors with respect to their particular circumstances.

Currency Conversion

Generally, for purposes of the Tax Act, all amounts relating to the acquisition, holding or disposition of the offered shares and warrants must be converted into Canadian dollars based on the exchange rates as determined in accordance with the Tax Act. The amounts subject to withholding tax and any capital gains or capital losses realized by a Non-Resident Holder may be affected by fluctuations in the Canadian-U.S. dollar exchange rate.

Dispositions

A Non-Resident Holder will not be subject to tax under the Tax Act on a capital gain realized on a disposition or deem disposition of an offered share, unless the offered share constitutes “taxable Canadian property” (as defined in the Tax Act) of the Non-Resident Holder at the time of disposition and the Non-Resident Holder is not entitled to relief under an applicable income tax treaty or convention.

Provided the offered shares are listed on a “designated stock exchange”, as defined in the Tax Act (which currently includes the TSXV and NASDAQ) at the time of disposition, the offered shares will generally not constitute taxable Canadian property of a Non-Resident Holder at that time, unless at any time during the 60-month period immediately preceding the disposition the following two conditions are satisfied concurrently: (i) (a) the Non-Resident Holder; (b) persons with whom the Non-Resident Holder did not deal at arm’s length (within the meaning of the Tax Act); (c) partnerships in which the Non-Resident Holder or a person described in (b) holds a membership interest directly or indirectly through one or more partnerships; or (d) any combination of the persons and partnerships described in (a) through (c), owned 25% or more of the issued shares of any class or series of the shares of Acasti; and (ii) more than 50% of the fair market value of the shares of Acasti was derived directly or indirectly from one or any combination of: real or immovable property situated in Canada, “Canadian resource properties”, “timber resource properties” (each as defined in the Tax Act), and options in respect of, or interests in or for civil law rights in, any such properties. Notwithstanding the foregoing, in certain circumstances set out in the Tax Act, the offered shares could be deemed to be taxable Canadian property. Even if the offered shares are taxable Canadian property to a Non-Resident Holder, such Non-Resident Holder may be exempt from tax under the Tax Act on the disposition of such common shares by virtue of an applicable income tax treaty or convention. A Non-Resident Holder contemplating a disposition of offered shares that may constitute taxable Canadian property should consult a tax advisor prior to such disposition.

Dividends

Dividends paid or credited on the offered shares or deemed to be paid or credited on the offered shares to a Non-Resident Holder will be subject to Canadian withholding tax under the Tax Act at a rate of 25% on the gross amount of the dividend, although such rate may be reduced under the provisions of an applicable income tax convention between Canada and the Non-Resident Holder’s country of residence. For example, where dividends on the offered shares are considered to be paid to or derived by a Non-Resident Holder that is the beneficial owner of the dividends and is a U.S. resident for the purposes of, and is entitled to benefits of, the Canada-U.S. Tax Treaty, the applicable rate of Canadian withholding tax is generally reduced to 15%. Not all persons who are U.S. residents will qualify for the benefits of the Canada-U.S. Tax Treaty. Non-Resident Holders are advised to consult their own tax advisors in this regard.

LEGAL MATTERS

Certain legal matters related to our common shares offered by this prospectus supplement and the accompanying prospectus will be passed upon on for us by Osler, Hoskin & Harcourt LLP, Montreal, Quebec, Canada and certain legal matters under United States law will be passed upon for us by Osler, Hoskin & Harcourt LLP, New York, New York. B. Riley FBR is being represented in connection with this offering by Duane Morris LLP, New York, New York.

EXPERTS

The financial statements of Acasti Pharma Inc. as at March 31, 2018 and 2017, and for the year ended March 31, 2018, the thirteen-month period ended March 31, 2017 and the year ended February 29, 2016, have been included herein and in the accompanying prospectus in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein and upon the authority of said firm as experts in accounting and auditing.

The audit report dated June 27, 2018 on these financial statements contains an explanatory paragraph that states that Acasti Pharma Inc. has incurred operating losses and negative cash flows from operations since inception, that its current assets are projected to be significantly less than what will be needed, and that it needs to obtain additional financing, which indicate the existence of a material uncertainty that casts substantial doubt about its ability to continue as a going concern. The financial statements do not include any adjustments that may be necessary if the going concern basis was not appropriate. It also contains an explanatory paragraph that states that the financial statements of Acasti Pharma Inc. as at February 28, 2017 and for the twelve-month and one-month periods ended February 28, 2017 and March 31, 2017 respectively are unaudited and accordingly, KPMG LLP does not express an opinion on them.

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” into the prospectus the documents we file with or furnish to the SEC, which means that we can disclose important information to you by referring you to these documents. The information that we incorporate by reference into the prospectus forms a part of the prospectus. We incorporate by reference into the prospectus the documents listed below:

- our Annual Report on Form 20-F for the fiscal year ended March 31, 2018, filed on June 29, 2018; and
- our Report of Foreign Private Issuer on Form 6-K furnished to the SEC on April 2, 2018, April 24, 2018 (two reports), April 27, 2018, May 9, 2018, May 14, 2018, June 5, 2018, June 8, 2018, July 2, 2018, August 1, 2018, August 14, 2018 (Film No.: 181014206), August 29, 2018, September 18, 2018, September 24, 2018, October 1, 2018, October 3, 2018 (two reports), October 4, 2018 (two reports), October 9, 2018, October 11, 2018, October 15, 2018, October 23, 2018, November 14, 2018 (Film No.: 181180374) and February 14, 2019.

All documents filed with the SEC by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or Exchange Act, subsequent to the date of this prospectus supplement and prior to the termination of the offering of the common shares hereunder shall be deemed to be incorporated herein by reference and to be a part hereof from the date of filing of such documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as modified or superseded, to constitute a part of this prospectus supplement.

Any person receiving a copy of the prospectus, including any beneficial owner, may obtain without charge, upon written or oral request, a copy of any of the documents incorporated by reference into the prospectus, except for the exhibits to those documents unless the exhibits are specifically incorporated by reference into those documents. Requests should be directed to our principal executive offices, 545 Promenade du Centropolis, Suite 100, Laval, Québec, Canada H7T 0A3, attention: Chief Financial Officer (telephone: (450) 686-4555).

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form F-3 (File No. 333-223464), of which this prospectus supplement and the accompanying prospectus form a part, under the Securities Act of 1933, as amended, to register our common shares offered by this prospectus supplement. This prospectus supplement and the accompanying prospectus do not contain all of the information contained in the registration statement and the exhibits and schedules to the registration statement. For further information about us and the common shares, please refer to the registration statement, including the exhibits to the registration statement. The exhibits to the registration statement provide more details of the matters discussed in this prospectus supplement and the accompanying prospectus.

We are subject to the informational requirements of the Exchange Act, and we file reports and other information with the SEC. You may read and copy any of our reports and other information at, and obtain copies upon payment of prescribed fees from, the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, DC 20549. In addition, the SEC maintains a web site that contains reports and other information regarding registrants that file electronically with the SEC at <http://www.sec.gov>. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

As a foreign private issuer, we are exempt under the Exchange Act from, among other things, certain rules prescribing the furnishing and content of proxy statements, and our executive officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

We are also subject to the full informational requirements of the securities commissions in all provinces of Canada, and you are also invited to read and copy any reports, statements or other information, other than confidential filings, that we file with the Canadian provincial securities commissions. These filings are also electronically available from the Canadian System for Electronic Document Analysis and Retrieval (SEDAR) at www.sedar.com, the Canadian equivalent of the SEC's electronic document gathering and retrieval system.

We maintain a corporate website at <http://www.acastipharma.com>. Information contained on, or that can be accessed through, our website does not constitute a part of this prospectus.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MARCH 6, 2018.

PROSPECTUS



**US\$50,000,000
Common Shares
Warrants
Units**

Acasti Pharma Inc. may offer and sell from time to time up to an aggregate of US\$50,000,000 of common shares (issued separately or upon exercise of warrants), warrants and units comprising any combination of common shares and warrants. The specific terms of any securities offered will be described in supplements to this prospectus. You should read this prospectus and any applicable prospectus supplement carefully before you purchase our securities. This prospectus may not be used to offer securities unless accompanied by a prospectus supplement.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis. The prospectus supplement for each offering of securities will describe in detail the plan of distribution. If underwriters, dealers and agents are used to sell these securities, we will name them and describe their compensation in a prospectus supplement.

Our outstanding common shares are listed for trading on the NASDAQ Stock Market, or NASDAQ, and the TSX Venture Exchange, or TSXV, under the symbol "ACST". On March 5, 2018, the closing price of our common shares on the NASDAQ Stock Market was US\$0.9998 per share and on the TSX Venture Exchange was \$1.30 per share. **There is currently no established trading market through which the securities, other than the common shares, may be sold and purchasers may not be able to resell the securities purchased under this prospectus. This may affect the pricing of the securities in the secondary market, the transparency and availability of trading prices, the liquidity of the securities and the extent of issuer regulation.**

So long as the aggregate market value worldwide of our outstanding common equity held by non-affiliates, or public float, is less than US\$75 million, the aggregate market value of securities sold by us under this prospectus during the period of 12 calendar months immediately preceding the date of sale may be no more than one-third of our public float. Our public float, as calculated in accordance with General Instruction I.B.5 of Form F-3, was approximately US\$20.3 million as of March 5, 2018. We have not sold any securities pursuant to General Instruction I.B.5 of Form F-3 during the prior 12 calendar month period that ends on and includes the date of this prospectus.

Investing in our securities involves risks. Prior to purchasing our securities, you should carefully consider the risk factors that will be described in any applicable prospectus supplement and the risk factors described in our filings with the Securities and Exchange Commission, or the SEC, as explained under the heading "Risk Factors" on page 6 of this prospectus.

Neither the SEC, nor any securities commission of any state of the United States or any Canadian securities regulator has approved or disapproved the securities offered hereby or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offence.

The date of this prospectus is , 2018.

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ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we have filed with the SEC utilizing a “shelf” registration process. Under this shelf registration process, we may sell the securities described in this prospectus in one or more offerings up to a total dollar amount of initial aggregate offering price of US\$50,000,000. This prospectus provides you with a general description of the securities that we may offer. Each time we sell securities under this process, we will provide a prospectus supplement that will contain specific information about the terms of that offering, including a description of any risks relating to the offering if those terms and risks are not described in this prospectus. A 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.

Before investing in our securities, please carefully read both this prospectus and any prospectus supplement together with the documents incorporated by reference into this prospectus, as listed under “Documents Incorporated by Reference,” and the additional information described below under “Where You Can Find More Information.”

We may sell securities to or through underwriters or dealers, and we may also sell securities directly to other purchasers or through agents. To the extent not described in this prospectus, the names of any underwriters, dealers, or agents employed by us in the sale of the securities covered by this prospectus, the principal amounts or number of shares or other securities, if any, to be purchased by such underwriters or dealers, and the compensation, if any, of such underwriters, dealers, or agents will be described in a prospectus supplement.

Owning securities may subject you to tax consequences in the United States. This prospectus or any applicable prospectus supplement may not describe these tax consequences fully. You should read the tax discussion in any prospectus supplement with respect to a particular offering and consult your own tax advisor with respect to your own particular circumstances.

You should rely only on the information contained in or incorporated by reference into this prospectus or a prospectus supplement. We 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. The distribution or possession of this prospectus in or from certain jurisdictions may be restricted by law. This prospectus is not an offer to sell the securities and is not soliciting an offer to buy the securities in any jurisdiction where the offer or sale is not permitted or where the person making the offer or sale is not qualified to do so or to any person to whom it is not permitted to make such offer or sale. You should assume that the information contained in this prospectus and in any applicable prospectus supplement is accurate only as of the date on the front cover of this prospectus or prospectus supplement, as applicable, and the information incorporated by reference into this prospectus or any prospectus supplement is accurate only as of the date of the document incorporated by reference. Our business, financial condition, results of operations and prospects may have changed since that date.

This prospectus and the documents incorporated by reference into this prospectus contain company names, product names, trade names, trademarks and service marks of Acasti and other organizations, all of which are the property of their respective owners. We own or have rights to trademarks, service marks or trade names that we use in connection with the operation of our business. In addition, our name, logo and website names and addresses are our service marks or trademarks. CaPre® and the phrase “BREAKING DOWN THE WALLS OF CHOLESTEROL” are our registered trademarks. The other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, the trademarks, service marks, tradenames and copyrights referred to in this prospectus are listed without the ©, ® and TM symbols, but we will assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensors to these trademarks, service marks and tradenames.

In this prospectus, unless the context otherwise requires, references to “Acasti,” the “company,” “we,” “us” or “our” refer to Acasti Pharma Inc.

The consolidated financial statements incorporated by reference into this prospectus are presented in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB.

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All references in this prospectus to “dollars,” “CDN\$” and “\$” refer to Canadian dollars, and references to “US\$” refer to United States dollars. Potential purchasers should be aware that foreign exchange rate fluctuations are likely to occur from time to time and that we do not make any representation with respect to future currency values. Investors should consult their own advisors with respect to the potential risk of currency fluctuations.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form F-3, of which this prospectus forms a part. This prospectus does not contain all the information set out in the registration statement. For further information about us and the securities, please refer to the registration statement, including the exhibits to the registration statement. The exhibits to the registration statement provide more details of the matters discussed in this prospectus.

We are subject to the informational requirements of the Securities Exchange Act of 1934, or the Exchange Act, and we file reports and other information with the SEC. You may read and copy any of our reports and other information at, and obtain copies upon payment of prescribed fees from, the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, DC 20549. In addition, the SEC maintains a web site that contains reports and other information regarding registrants that file electronically with the SEC at www.sec.gov. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

As a foreign private issuer, we are exempt under the Exchange Act from, among other things, certain rules prescribing the furnishing and content of proxy statements, and our executive officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. companies whose securities are registered under the Exchange Act.

We are also subject to the full informational requirements of the securities commissions in all provinces of Canada, and you are also invited to read and copy any reports, statements or other information, other than confidential filings, that we file with the Canadian provincial securities commissions. These filings are also electronically available from the Canadian System for Electronic Document Analysis and Retrieval at www.sedar.com, the Canadian equivalent of the SEC's electronic document gathering and retrieval system.

We maintain a corporate website at www.acastipharma.com. Information contained on, or that can be accessed through, our website does not constitute a part of this prospectus.

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus the documents we file with, or furnish to, them, which means that we can disclose important information to you by referring you to these documents. The information that we incorporate by reference into this prospectus forms a part of this prospectus, and information that we file later with the SEC automatically updates and supersedes any information in this prospectus. We incorporate by reference into this prospectus the documents listed below:

- our Annual Report on Form 20-F for the fiscal year ended March 31, 2017, filed on June 27, 2017;
- the description of our common shares set forth in our registration statement on Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017 and declared effective on December 19, 2017 and our Form 8-A filed with the SEC on January 4, 2013, including any amendment or report filed for the purpose of updating that description; and
- our Report of Foreign Private Issuer on Form 6-K furnished to the SEC on July 17, 2017, August 25, 2017, November 20, 2017, November 22, 2017, December 27, 2017, January 8, 2018, January 16, 2018, January 22, 2018 and February 14, 2018 (Film Number: 18607146) (excluding the notice in Exhibit 99.2 thereto stating: “These interim financial statements have not been reviewed by the Corporation’s auditors.”).

All documents filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of this prospectus and prior to the termination of the offering of the securities offered by this prospectus are incorporated by reference into this prospectus and form part of this prospectus from the date of filing or furnishing of these documents. Any documents that we furnish to the SEC on Form 6-K subsequent to the date of this prospectus will be incorporated by reference into this prospectus only to the extent specifically set forth in the Form 6-K.

Any statement contained in a document incorporated by reference into this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, in one of those other documents or in any other later filed document that is also incorporated by reference into this prospectus modifies or supersedes that statement. Any such statement so modified shall not be deemed, except as so modified, to constitute a part of this prospectus. Any such statement so superseded shall be deemed not to constitute a part of this prospectus.

Any person receiving a copy of this prospectus, including any beneficial owner, may obtain without charge, upon written or oral request, a copy of any of the documents incorporated by reference into this prospectus, except for the exhibits to those documents unless the exhibits are specifically incorporated by reference into those documents. Requests should be directed to our principal executive offices, 545 Promenade du Centropolis, Suite 100, Laval, Québec, Canada H7T 0A3, attention: Chief Financial Officer (telephone: (450) 686-4555).

SUMMARY

This summary does not contain all of the information about our company that may be important to you and your investment decision. You should carefully read the entire prospectus and the applicable prospectus supplement, including the section entitled “Risk Factors” as well as the risk factors described in the documents incorporated by reference into this prospectus and the applicable prospectus supplement, before making an investment decision.

Our Company

We are a biopharmaceutical innovator focused on the research, development and commercialization of prescription drugs using omega 3, or OM3, fatty acids derived from krill oil. OM3 fatty acids have extensive clinical evidence of safety and efficacy in lowering triglycerides, or TGs, in patients with hypertriglyceridemia, or HTG. Our lead product candidate is CaPre, an OM3 phospholipid, which we are developing initially for the treatment of severe HTG, a condition characterized by very high levels of TGs in the bloodstream (≥ 500 mg/dL). Market research commissioned by us suggests there is a significant unmet medical need for an effective, safe and well-absorbing OM3 therapeutic that demonstrates a positive impact on the major blood lipids associated with cardiovascular disease risk. We believe that, if supported by our Phase 3 program in the United States, which we initiated during the second half of 2017 and are now actively enrolling patients, CaPre will address this unmet medical need. We also believe the potential exists to expand CaPre’s initial indication to patients with high TGs (blood levels between 200 – 499 mg/dL), although at least one additional clinical trial would likely be required to expand CaPre’s indication to this segment. We may seek to identify new potential indications for CaPre that may be appropriate for future studies and pipeline expansion. In addition, we may also seek to in-license other cardiometabolic drug candidates for drug development and commercialization.

In four clinical trials conducted to date, we saw the following beneficial effects with CaPre, and we are seeking to demonstrate similar results in our Phase 3 program:

- significant reduction of TGs and non-high-density lipoprotein cholesterol (non-HDL-C) levels in the blood of patients with mildly elevated to severe HTG;
- no deleterious effect on low-density lipoprotein cholesterol, or LDL-C, or “bad” cholesterol, with the potential to reduce LDL-C;
- potential to increase high-density lipoprotein cholesterol, or “good” cholesterol;
- good bioavailability (absorption by the body), even under fasting conditions;
- no significant food effect (meaning minimal difference in absorption) when taken with low-fat or high-fat meals; and
- an overall safety profile similar to that demonstrated by currently marketed OM3s.

Corporate Information

We were incorporated on February 1, 2002 under Part 1A of the *Companies Act* (Québec) under the name “9113-0310 Québec Inc”. On August 7, 2008, pursuant to a Certificate of Amendment, we changed our name to “Acasti Pharma Inc.” and on February 14, 2011, the *Business Corporations Act* (Québec) came into effect and replaced the *Companies Act* (Québec). We are now governed by the *Business Corporations Act* (Québec), or the QBCA.

Our principal executive offices are currently located at 545 Promenade du Centropolis, Suite 100, Laval, Québec, Canada H7T 0A3. Our telephone number is (450) 686-4555.

RISK FACTORS

An investment in our securities involves a high degree of risk and should be considered speculative. An investment in our securities should only be undertaken by those persons who can afford the total loss of their investment. You should carefully consider the risks and uncertainties described under “Item 3D. Risk Factors” in our Annual Report on Form 20-F for the fiscal year ended March 31, 2017 and under “Risk Factors” in our registration statement on Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017 and declared effective on December 19, 2017, which sections are incorporated by reference herein, and the other information contained in this prospectus, as updated by our subsequent filings under the Exchange Act and the risk factors and other information contained in any applicable prospectus supplement, before purchasing any of our securities. Additional risks and uncertainties not presently known to us or that we believe to be immaterial may also adversely affect our business. If any of these risks actually occur, our business, financial condition, prospects, results of operations or cash flow could be materially and adversely affected and you could lose all or a part of the value of your investment.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents incorporated by reference herein, contains information that may be forward-looking statements within the meaning of applicable securities laws. Forward-looking statements can be identified by the use of terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “intend,” “estimate,” “predict,” “potential,” “continue” or other similar expressions concerning matters that are not statements about the present or historical facts. Forward-looking statements in this prospectus, including any documents incorporated by reference herein, include, among other things, or statements about:

- our need for additional financing and our estimates regarding our future financing and capital requirements;
- our projected capital requirements to fund our anticipated expenses, including our research and development and general and administrative expenses;
- our ability to conduct all required clinical and nonclinical trials for CaPre, including the timing and results of those clinical trials;
- our strategy, future operations, prospects and the plans of our management;
- the design, regulatory plan, timeline, costs and results of our clinical and nonclinical trials for CaPre;
- the timing and outcome of our meetings and discussions with the U.S. Food and Drug Administration, or FDA;
- our planned regulatory filings for CaPre, and their timing;
- the timing and results from two competitor outcomes studies in patients with high TGs (blood levels between 200-499 mg/dL);
- the potential benefits and risks of CaPre as compared to other products in the pharmaceutical, medical food and natural health products markets;
- our anticipated marketing advantages and product differentiation of CaPre and its potential to become a best-in-class OM3 compound for the treatment of severe HTG (very high blood levels of TGs over 500 mg/dL);
- our estimates of the size of the potential market for CaPre, unmet medical needs in that market, the potential for market expansion, and the rate and degree of market acceptance of CaPre if it reaches commercialization, and our ability to serve that market;
- the potential to expand CaPre’s indication for the treatment of high TGs;
- the degree to which physicians would switch their patients to a product with CaPre’s target product profile;
- our strategy and ability to develop, commercialize and distribute CaPre in the United States and elsewhere;
- the manufacturing scale-up of CaPre and the related timing;
- our intention and ability to strengthen our patent portfolio and other means of protecting our intellectual property rights;
- the availability, consistency and sources of our raw materials, including krill oil;

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- our expectation to be able to rely on third parties to manufacture CaPre whose manufacturing processes and facilities are in compliance with current good manufacturing practices, or cGMP;
- the potential for OM3s in other cardiovascular medicine indications;
- our ability to consummate development and/or distribution partnerships to support the development and commercialization of CaPre, and to pursue strategic opportunities to provide capital and market access;
- our ability to reach a definitive agreement based upon our non-binding term sheet with a leading China-based pharmaceutical company for the commercialization of CaPre in certain Asian countries; and
- our expectation regarding our financial performance, including our revenues, profitability, research and development, costs and expenses, gross margins, liquidity, capital resources, capital expenditures and our access to additional capital.

All forward-looking statements reflect our belief and assumptions based on information available at the time the assumption was made. The forward-looking statements in this prospectus are subject to a number of known and unknown risks, uncertainties and other factors, including those described in this prospectus under “Risk Factors” and in the documents incorporated by reference herein, many of which are beyond our control, that could cause our actual results and developments to differ materially from those that are disclosed in or implied by the forward-looking information, including, among others:

- we have significant additional future capital needs and may not be able to raise additional financing required to fund further research and development, clinical studies, obtain regulatory approvals, and meet ongoing capital requirements to continue our current operations on commercially acceptable terms or at all;
- risks related to timing and possible difficulties, delays or failures in our Phase 3 program for CaPre;
- pre-clinical and clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of CaPre;
- we may fail to achieve our publicly announced milestones on time;
- outcome study data from two of our competitors in high TGs patients may be negative, which could also negatively affect the market perception of CaPre;
- there may be difficulties, delays, or failures in obtaining health care reimbursements for CaPre;
- the market opportunity for, and demand and market acceptance of, CaPre may not be as strong as we anticipate;
- CaPre may not prove to be as safe and effective or as potent as we currently believe;
- our Phase 3 program may not produce positive results;
- our anticipated studies and submissions to the FDA may not occur as currently anticipated, or at all;
- the FDA could reject our 505(b)(2) regulatory submission;
- we may encounter difficulties, delays or failures in obtaining regulatory approvals for the initiation of clinical trials or to market CaPre;

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- we may need to conduct additional future clinical trials for CaPre, the occurrence and success of which cannot be assured;
- CaPre may have unknown side effects;
- the FDA may refuse to approve CaPre, or place restrictions on our ability to commercialize CaPre;
- CaPre could be subject to extensive post-market obligations and continued regulatory review, which may result in significant additional expense and affect sales, marketing and profitability;
- we may encounter difficulties in completing the development and commercialization of CaPre;
- third parties we will rely upon to conduct our Phase 3 program for CaPre may not effectively fulfill their obligations to us, including complying with FDA requirements;
- recently enacted and future laws may increase the difficulty and cost for us to obtain marketing approval of and commercialize CaPre and affect the prices we can charge;
- new laws, regulatory requirements, and the continuing efforts of governmental and third-party payors to contain or reduce the costs of healthcare through various means could adversely affect our business;
- third parties that we will rely upon to manufacture, supply and distribute CaPre may not effectively fulfill their obligations to us, including complying with FDA requirements;
- there may not be an adequate supply of raw materials, including krill oil, in sufficient quantities and quality and to produce CaPre under cGMP standards;
- we may not be able to meet applicable regulatory standards for the manufacture of CaPre or scale-up our manufacturing successfully;
- we may not be able to produce future clinical batches, if needed, and commercial batches of CaPre in a timely manner or at all;
- we currently have no sales, marketing and distribution personnel;
- our patent applications may not result in issued patents, our issued patents may be circumvented or challenged and ultimately struck down, and we may not be able to successfully protect our trade secrets or other confidential proprietary information;
- we may face claims of infringement of third party intellectual property and other proprietary rights;
- we sublicense intellectual property that has been recently sold by Neptune Technologies & Bioresources Inc., or Neptune, to Aker BioMarine Antarctic AS (and then licensed back to Neptune). Although our license agreement with Neptune remains in place, our rights under the sublicense agreement are subject to the continued term of the license between Neptune and Aker BioMarine Antarctic AS;
- we may face product liability claims and product recalls;
- we face intense competition from other companies in the pharmaceutical, medical food and natural health product industries;
- we have a history of negative operating cash flow and may never become profitable or be able to sustain profitability;

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- we may not be able to attain our targeted cost of goods sold, and levels of insurance reimbursement for CaPre may not be commercially viable in all global markets;
- we may acquire businesses or products or form strategic partnerships in the future that may not be successful;
- we may be unable to secure development and/or distribution partnerships to support the development and commercialization of CaPre, provide development capital, or market access;
- we recently entered into a non-binding term sheet with a leading China-based pharmaceutical company that would grant it an exclusive right to commercialize CaPre in certain Asian countries, and it is possible that no definitive agreement with the China-based company will be reached, or if a definitive agreement is reached its terms may differ from those in the term sheet;
- we rely on key management and skilled scientific personnel; and
- general changes in economic and capital market conditions could adversely affect us.

All of the forward-looking statements in this prospectus and in the documents incorporated by reference are qualified by this cautionary statement. There can be no guarantee that the results or developments that we anticipate will be realized or, even if substantially realized, that they will have the consequences or effects on our business, financial condition or results of operations that we anticipate. As a result, you should not place undue reliance on the forward-looking statements. Except as required by applicable law, we do not undertake to update or amend any forward-looking statements, whether as a result of new information, future events or otherwise. All forward-looking statements are made as of the date of this prospectus. Forward-looking statements made in a document incorporated by reference into this prospectus are made as of the date of the original document and have not been updated by us except as expressly provided for in this prospectus.

EXCHANGE RATE INFORMATION

The following table presents the high, low, average and period end exchange rate for one Canadian dollar expressed as one U.S. dollar for each of our last five fiscal years. The average rate is calculated using the average of the exchange rates on the last day of each month during the period.

<u>Fiscal year ended</u>	<u>Low</u>	<u>Average</u>	<u>High</u>	<u>Period End</u>
	(US\$)			
February 28, 2013	0.9599	0.9903	1.0299	0.9723
February 28, 2014	0.8952	0.9555	0.9977	0.9029
February 28, 2015	0.7863	0.8003	0.9404	0.7995
February 29, 2016	0.6854	0.7645	0.8368	0.7395
March 31, 2017	0.7363	0.7618	0.7972	0.7548

The following table presents the high, low, average and period end exchange rate for one Canadian dollar expressed as one U.S. dollar for each month during the previous six months.

<u>Month</u>	<u>Low</u>	<u>Average</u>	<u>High</u>	<u>Period End</u>
	(US\$)			
September 2017	0.8013	0.8142	0.8245	0.8013
October 2017	0.7756	0.7935	0.8018	0.7756
November 2017	0.7759	0.7832	0.7885	0.7759
December 2017	0.7760	0.7831	0.7971	0.7971
January 2018	0.7978	0.8047	0.8135	0.8135
February 2018	0.7807	0.7946	0.8138	0.7807

The exchange rates above are based upon the noon buying rate, as quoted by the Bank of Canada. As of May 1, 2017, the Bank of Canada no longer publishes updated data for exchange rates published under previous methodologies, including daily noon and closing rates as well as high and low exchange rates. For the month of May 2017 and each month thereafter, the exchange rate presented above is based upon the daily average closing rate. As of March 5, 2018, the exchange rate for one Canadian dollar expressed as one U.S. dollar, as quoted by the Bank of Canada was \$1.00 = US\$0.7706.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, the net proceeds that we receive from the sale of the securities offered by this prospectus will be used by us for working capital and general corporate purposes, which includes the further development of CaPre, including continued clinical site activation, progression of patient enrollment and production of clinical materials (both CaPre and placebo) for our Phase 3 program, completion of our phase 3 studies, preparation of our regulatory (NDA) submission and expansion of business development and pre-commercialization activities. We have not allocated any portion of the net proceeds for any particular use as of the date of this prospectus. The net proceeds may be invested temporarily until they are used for their stated purpose. Specific information concerning the use of proceeds from the sale of any securities will be included in the prospectus supplement relating to such securities.

PRICE RANGE OF COMMON SHARES AND TRADING MARKETS

Since January 7, 2013, our common shares have been listed on the NASDAQ under the ticker symbol ACST. The following tables set forth, for the periods indicated, the high and low market prices of our common shares as reported on the TSXV and the NASDAQ.

(a) For the five most recent full fiscal years:

Fiscal year ended	TSXV		NASDAQ	
	High \$	Low \$	High US\$	Low US\$
Feb. 28, 2013 ⁽¹⁾	27.60	16.00	39.90	20.00
Feb. 28, 2014 ⁽¹⁾	43.20	11.50	42.00	10.90
Feb. 28, 2015 ⁽¹⁾	14.90	11.50	13.40	10.90
Feb. 29, 2016	7.60	1.83	6.10	1.30
Mar. 31, 2017	4.03	1.47	3.09	1.11

(1) Our common shares were consolidated on October 15, 2015, on the basis of one (1) post-consolidation common share for every 10 pre-consolidation common shares, and each fractional common share resulting from the consolidation was rounded up. The common share price was increased proportionally to reflect the consolidation.

(b) For each full financial quarter of the two most recent full fiscal years and any subsequent period:

Period	TSXV		NASDAQ	
	High \$	Low \$	High US\$	Low US\$
1st Quarter ended May 31, 2015 ⁽¹⁾	7.60	4.00	6.10	5.00
2nd Quarter ended Aug. 31, 2015 ⁽¹⁾	5.50	3.50	4.20	3.90
3rd Quarter ended Nov. 30, 2015 ⁽¹⁾	4.70	2.65	3.80	2.01
4th Quarter ended Feb. 29, 2016	4.40	1.83	3.20	1.30
1st Quarter ended May 31, 2016	2.45	1.50	1.88	1.20
2nd Quarter ended Aug. 31, 2016	2.25	1.66	1.79	1.21
3rd Quarter ended Nov. 30, 2016	4.03	1.62	3.09	1.20
Four-month period ended Mar. 31, 2017	2.66	1.47	2.03	1.11
1st Quarter ended June 30, 2017	1.96	1.65	1.51	1.23
2nd Quarter ended September 30, 2017	1.97	1.57	1.45	1.24
3rd Quarter ended December 31, 2017	2.99	1.07	3.36	0.84

(1) Our common shares were consolidated on October 15, 2015, on the basis of one (1) post-consolidation common share for every 10 pre-consolidation common shares, and each fractional common share resulting from the consolidation was rounded up. The common share price was increased proportionally to reflect the consolidation.

(c) For the most recent six months:

Period	TSXV		NASDAQ	
	High \$	Low \$	High US\$	Low US\$
September 2017	1.97	1.57	1.45	1.27
October 2017	1.77	1.61	1.42	1.28
November 2017	2.99	1.57	3.36	1.21
December 2017	2.32	1.07	1.90	0.84
January 2018	1.62	1.09	1.30	0.88
February 2018	1.52	1.21	1.14	0.93

The holders of common shares are entitled to vote at all meetings of our shareholders except meetings at which only holders of a specified class or series of shares are entitled to vote. The holders of common shares are entitled to receive dividends as and when declared by the board, if any.

No common shares have been issued subject to call or assessment. There are no pre-emptive or conversion rights and no provisions for redemption or purchase for cancellation, surrender, or sinking or purchase funds. Our common shares must be issued as fully-paid and non-assessable, and are not subject to further capital calls by us. All of the common shares rank equally as to voting rights, participation in a distribution of our assets on a liquidation, dissolution or winding-up, and the entitlement to dividends. Common shares are transferable at the offices of our transfer agent and registrar, Computershare Trust Company of Canada, in Toronto, Ontario, Canada and Montreal, Québec, Canada. There are no restrictions in our corporate documents on the free transferability of the common shares.

DESCRIPTION OF SHARE CAPITAL

Overview

Our authorized capital consists of an unlimited number of no par value common shares and an unlimited number of no par value Class B, Class C, Class D and Class E preferred shares (collectively, the preferred shares), issuable in one or more series. As of February 9, 2018, no preferred shares were issued and outstanding and there were:

- a total of 25,604,610 common shares issued and outstanding and no preferred shares issued and outstanding;
- 2,303,322 options to purchase common shares issued to our directors, officers and employees, at a weighted average exercise price of \$1.83 per common share;
- 18,400,000 Series 8 public offering warrants issued in 2014 to purchase common shares issued and outstanding (including 592,500 warrants held by Neptune), exercisable at a price of US\$15.00 per common share until December 3, 2018 (10 warrants must be exercised in order to acquire one common share);
- 161,654 Series 9 private placement warrants issued in 2014 to purchase common shares issued and outstanding, exercisable at a price of \$13.30 per common share until December 3, 2018;
- \$2,000,000 aggregate principal amount of unsecured convertible debentures, maturing on February 21, 2020, issued in our February 2017 private placement and contingent warrants to acquire up to 1,052,630 common shares:
 - the debentures are convertible into common shares at any time by the holder at a fixed price of \$1.90 per common share, except if we pay before the maturity all or any portion of the convertible debentures;
 - the contingent warrants will be exercisable for the remaining term of the convertible debentures at a fixed price of \$1.90 per common share;
- warrants issued in connection with our February 2017 public offering to purchase up to 1,904,034 common shares at an exercise price of \$2.15 per common share, at any time until February 21, 2022;
- broker warrants issued in connection with our February 2017 public offering to purchase up to 117,496 common shares at an exercise price of \$2.15 per common share, at any time until February 21, 2018;
- warrants issued in connection with our December 2017 public offering to purchase up to 9,802,935 common shares at an exercise price of US\$1.26 per common share, at any time until December 27, 2022; and
- broker warrants issued in connection with our December 2017 public offering to purchase up to 495,050 common shares at an exercise price of US\$1.2625 per common share, at any time until December 27, 2022.

The following is a brief description of the rights, privileges, conditions and restrictions attaching to the common shares and preferred shares.

Common Shares

Voting Rights

Each common share entitles its holder to receive notice of, and to attend and vote at, all annual or special meetings of our shareholders. Each common share entitles its holder to one vote at any meeting of our shareholders, other than meetings at which only the holders of a particular class or series of shares are entitled to vote due to statutory provisions or the specific attributes of this class or series.

Dividends

Subject to the prior rights of the holders of preferred shares ranking before the common shares as to dividends, the holders of common shares are entitled to receive dividends as declared by the board out of funds that are available for the payment of dividends.

Winding-up and Dissolution

In the event of our voluntary or involuntary winding-up or dissolution, or any other distribution of our assets among our shareholders for the purposes of winding up its affairs, the holders of common shares shall be entitled to receive, after payment by us to the holders of preferred shares ranking prior to common shares regarding the distribution of our assets in the case of winding-up or dissolution, share for share, the remainder of our property, with neither preference nor distinction. The order of priority, applicable to all classes of our shares with respect to the redemption, liquidation, dissolution or distribution of property (the order of priority) is as follows: First, the Class E non-voting shares; Second, the Class D non-voting shares; Third, the Class B multiple voting shares and Class C non-voting shares, *pari passu*; and Fourth, the common shares. Notwithstanding the order of priority, shareholders of a class of shares may renounce the order of priority by unanimous approval by all shareholders of that class of shares.

Dividend Policy

We do not anticipate paying any cash dividend on our common shares in the foreseeable future. We presently intend to retain future earnings to finance the development and growth of our business. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements and other factors the board of directors deems relevant. In addition, the terms of any future debt or credit facility may preclude us from paying dividends. Any remittances of dividends to United States residents and to other non-residents are, however, subject to withholding tax.

Preferred Shares

Class B Multiple Voting Shares

Each Class B multiple voting share entitles the holder thereof to 10 votes per share in all of our shareholder meetings.

Dividends. Holders of Class B multiple voting shares are entitled to receive, as and when such dividends are declared, an annual non-cumulative dividend of 5% on the amount paid for the said shares, payable at the time and in the manner which the directors may determine and subject to the order of priority.

Participation. Subject to the provisions of subsection 5.2.2 of our articles of incorporation, or Articles, holders of Class B multiple voting shares do not have the right to participate in our profits or surplus assets.

Conversion. Holders of Class B multiple voting shares have the right, at their entire discretion, to convert, part or all of the Class B multiple voting shares they hold into common shares on the basis of 1 common share for each Class B multiple voting share converted.

Redemption. Subject to the provisions of the QBCA and the order of priority, holders of Class B multiple voting shares have the right to demand from us, upon 30 days' written notice, that we redeem the Class B multiple voting shares at a price equivalent to the amount paid for such shares plus the redemption premium, as defined in subsection 5.2.4.1 of the Articles, and any and all declared but yet unpaid dividends on same.

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Liquidation. In the event of our dissolution or liquidation or any other distribution of our property, the Class B voting shareholders have the right to be reimbursed for the amount paid for their Class B multiple voting shares plus the redemption premium, as defined in subsection 5.2.4.1 of our Articles as well as the amount of any and all declared but yet unpaid dividends on their shares, subject to the order of priority.

Class C Non-Voting Shares

Subject to the provisions of the QBCA, holders of Class C non-voting shares are neither entitled to vote at any meeting of our shareholders, receive a notice of any such meeting, nor attend any such meeting.

Dividends. Holders of Class C non-voting shares are entitled to receive, as and when such dividends are declared, an annual non-cumulative dividend of 5% on the amount paid for the said shares, plus a redemption premium as defined in subsection 5.3.6.1 of our Articles, payable at the time and in the manner which the directors may determine and subject to the order of priority.

Participation. Subject to the provisions of subsection 5.3.2 of our Articles, holders of Class C non-voting shares do not have the right to participate in our profits or surplus assets.

Conversion. Holders of Class C non-voting shares have the right, at their entire discretion, to convert, part or all of the Class C non-voting shares they hold into common shares on the basis of 1 common share for each Class C non-voting share converted.

Forced Conversion. All of our Class C non-voting shares shall automatically be converted in common shares upon the request of an unrelated third-party investor in us investing more than \$500,000, or any other amount to be determined by the board of directors in us and requesting as a condition to the investment that the Class C non-voting shares be converted into common shares on the basis of 1 common share for each Class C non-voting share converted.

Redemption. Subject to the provisions of the QBCA and the order of priority, holders of Class C non-voting shares have the right to demand, upon 30 days' written notice, that we redeem their Class C non-voting shares at a price equivalent to the amount paid for the shares plus the redemption premium, as defined in subsection 5.3.6.1 of our Articles, and any and all declared but yet unpaid dividends on the shares.

Liquidation. In the event of our dissolution or liquidation or any other distribution of our property, Class C non-voting shareholders have the right to be reimbursed for the amount paid for their Class C non-voting shares plus the redemption premium, as defined in subsection 5.3.6.1 of our Articles, as well as the amount of any and all declared but yet unpaid dividends on their shares, subject to the order of priority.

Class D Non-Voting Shares

Subject to the provisions of the QBCA, holders of Class D non-voting shares are neither entitled to vote at any meeting of the shareholders, receive a notice of any such meeting, nor attend any such meeting.

Dividends. Holders of Class D non-voting shares are entitled to receive, as and when such dividends are declared, a monthly non-cumulative dividend of 0.5% to 2% on the amount paid for the shares, plus a redemption premium as defined in subsection 5.4.6.1 of our Articles, payable at the time and in the manner which the directors may determine and subject to the order of priority.

Participation. Subject to the provisions of subsection 5.4.2 of our Articles, holders of Class D non-voting shares do not have the right to participate in our profits or surplus assets.

Conversion. Holders of Class D non-voting shares have the right, at their discretion, to convert, part or all of their Class D non-voting shares into common shares on the basis of a number of common shares equal to the number of Class D non-voting shares converted multiplied by a conversion ratio, calculated as follows:

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$$\text{Conversion Ratio} = \frac{\text{The product obtained by multiplying a factor to be agreed at the time of the issuance of the Class D non-voting shares by the average amount paid per share for the Class D non-voting shares plus the redemption premium per share, as defined in subsection 5.4.6.1 of our Articles as well as the amount of any and all declared but yet paid dividends on the shares}}{\text{Fair market value of the common shares at the date of any conversion of Class D non-voting shares into common shares}}$$

Forced Conversion. All of our Class D non-voting shares automatically convert into common shares upon the request of an unrelated third party investor in us, investing more than \$500,000, or any other amount to be determined by the board of directors, in us and requesting as a condition to the investment that the Class D non-voting shares be converted into common shares on the basis of a number of common shares equal to the number of Class D non-voting shares converted multiplied by the conversion ratio, calculated as follows:

$$\text{Conversion Ratio} = \frac{\text{The product obtained by multiplying a factor to be agreed at the time of the issuance of the Class D non-voting shares by the average amount paid per share for the Class D non-voting shares plus the redemption premium per share, as defined in subsection 5.4.6.1 of our Articles as well as the amount of any and all declared but yet paid dividends on the shares}}{\text{Fair market value of the common shares at the date of any conversion of Class D non-voting shares into common shares}}$$

Redemption. Subject to the provisions of the QBCA and the order of priority, holders of Class D non-voting shares have the right to demand, upon 30 days' written notice, that we redeem their Class D non-voting shares at a price equivalent to the amount paid for the shares plus the redemption premium, as defined in subsection 5.4.6.1 of our Articles, and any and all declared but yet unpaid dividends on the shares.

Liquidation. In the event of our dissolution or liquidation or any other distribution of our property, the Class D non-voting shareholders shall have the right to be reimbursed for the amount paid for their Class D non-voting shares plus the redemption premium, as defined in subsection 5.4.6.1 of our Articles as well as the amount of any and all declared but yet unpaid dividends on their shares, subject to the order of priority.

Class E Non-Voting Shares

Subject to the provisions of the QBCA, holders of Class E non-voting shares are neither entitled to vote at any meeting of the shareholders, receive a notice of any such meeting, nor attend any such meeting.

Dividends. Holders of Class E non-voting shares are entitled to receive, as and when such dividends are declared, a monthly non-cumulative dividend of 0.5% to 2% on the amount paid for the shares, payable at the time and in the manner which the directors may determine and subject to the order of priority.

Participation. Subject to the provisions of subsection 5.5.2 of our Articles, holders of Class E non-voting shares do not have the right to participate in our profits.

Conversion. Holders of Class E non-voting shares have the right, at their discretion, to convert, part or all of their Class E non-voting shares into common shares on the basis of a number of common shares equal to the number of Class E non-voting shares converted multiplied by the conversion ratio, calculated as follows:

$$\text{Conversion Ratio} = \frac{\text{The product obtained by multiplying a factor to be agreed at the time of the issuance of the Class E non-voting shares by the average amount paid per share for the Class E non-voting shares plus the amount of any and all declared but yet paid dividends on the shares}}{\text{Fair market value of the common shares at the date of any conversion of Class E non-voting shares into common shares}}$$

Redemption. Subject to the provisions of the QBCA and the order of priority, we have the right, upon 30 days' written notice, to redeem the Class E non-voting shares at a price equivalent to the amount paid for the shares and any and all declared but yet unpaid dividends on the shares.

Liquidation. In the event of our dissolution or liquidation or any other distribution of our property, the Class E non-voting shareholders have the right to be reimbursed for the amount paid for their Class E non-voting shares as well as the amount of any and all declared but yet unpaid dividends on the shares, subject to the order of priority.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common shares. Warrants may be offered separately or together with other securities offered by this prospectus, as the case may be. Unless the applicable prospectus supplement otherwise indicates, each series of warrants will be issued under a separate warrant agreement to be entered into between us and one or more banks or trust companies acting as warrant agent. The applicable prospectus supplement will include details of the warrant agreements covering the warrants being offered. The warrant agent will act solely as our agent and will not assume a relationship of agency with any holders of warrant certificates or beneficial owners of warrants.

The following sets forth certain general terms and provisions of the warrants offered under this prospectus. The specific terms of the warrants, and the extent to which the general terms described in this section apply to those warrants, will be set forth in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

The particular terms of each issue of warrants will be described in the related prospectus supplement. This description will include some or all of the following:

- the designation and aggregate number of warrants;
- the price at which the warrants will be offered;
- the currency or currencies in which the warrants will be offered;
- the designation and terms of our common shares purchasable upon exercise of the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- the number of common shares that may be purchased upon exercise of each warrant and the price at which and currency or currencies in which our common shares may be purchased upon exercise of each warrant;
- the designation and terms of any securities with which the warrants will be offered, if any, and the number of the warrants that will be offered with each security;
- the date or dates, if any, on or after which the warrants and the related securities will be transferable separately;
- if applicable, whether the warrants will be subject to redemption or call and, if so, the terms of such redemption or call provisions;
- material United States and Canadian tax consequences of owning the warrants; and
- any other material terms or conditions of the warrants.

Each warrant will entitle the holder to purchase common shares, as specified in the applicable prospectus supplement at the exercise price that we describe therein. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities that may be offered under this prospectus, in any combination. The following information, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of any such the units that we may offer under this prospectus. While the information below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the general terms described below.

We will file the form of unit agreement, if any, between us and a unit agent that describes the terms and conditions of the series of units we are offering, and any supplemental agreements, concurrently with the filing of the applicable prospectus supplement under which such series of units are offered. This summary is subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement, if any, and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus, as well as the complete unit agreement, if any, and any supplemental agreements that contain the terms of the units.

We may issue units comprising one or more of common shares and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement, under which a unit may be issued, if any, may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. We will describe in the applicable prospectus supplement the terms of the series of units.

The provisions described in this section, as well as those described under “Description of Share Capital” and “Description of Warrants” will apply to each unit and to any common share or warrant included in each unit, respectively.

We may issue units in such amounts and in numerous distinct series as we determine.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus to or through underwriters or dealers, and also may sell those securities to one or more other purchasers directly or through agents, including sales pursuant to ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers, or if indicated in a prospectus supplement, pursuant to delayed delivery contracts, by remarketing firms or by other means. Underwriters may sell securities to or through dealers. Each prospectus supplement will set forth the terms of the offering, including the name or names of any underwriters, dealers or agents and any fees or compensation payable to them in connection with the offering and sale of a particular series or issue of securities, the public offering price or prices of the securities and the proceeds from the sale of the securities.

The securities may be sold, from time to time in one or more transactions at a fixed price or prices which may be changed or at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices, including sales made directly on the NASDAQ or other existing trading markets for the securities. The prices at which the securities may be offered may vary as between purchasers and during the period of distribution. If, in connection with the offering of securities at a fixed price or prices, the underwriters have made a bona fide effort to sell all of the securities at the initial offering price fixed in the applicable prospectus supplement, the public offering price may be decreased and thereafter further changed, from time to time, to an amount not greater than the initial public offering price fixed in such prospectus supplement, in which case the compensation realized by the underwriters will be decreased by the amount that the aggregate price paid by purchasers for the securities is less than the gross proceeds paid by the underwriters to us.

Underwriters, dealers and agents who participate in the distribution of the securities may be entitled under agreements to be entered into with us to indemnification by us against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which such underwriters, dealers or agents may be required to make in respect thereof. Such underwriters, dealers and agents may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

In connection with any offering of securities, the underwriters may over-allot or effect transactions which stabilize or maintain the market price of the securities offered at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. Any underwriters, dealers or agents to or through which securities other than our common shares are sold by us for public offering and sale may make a market in such securities, but such underwriters, dealers or agents will not be obligated to do so and may discontinue any such market making at any time and without notice. No assurance can be given that a market for trading in securities of any series or issue will develop or as to the liquidity of any such market, whether or not such securities are listed on a securities exchange.

The place, time of delivery, and other terms of the offered securities will be described in the applicable prospectus supplement.

CERTAIN INCOME TAX CONSIDERATIONS

The applicable prospectus supplement may describe certain United States federal income tax consequences of the acquisition, ownership and disposition of securities offered by this prospectus by an initial investor who is subject to United States federal income taxation.

The applicable prospectus supplement may also describe certain Canadian federal income tax consequences to investors described therein of acquiring securities offered by the prospectus.

ENFORCEMENT OF CIVIL LIABILITIES

We are incorporated under the laws of the Province of Quebec. Substantially all of our assets are located outside the United States. In addition, several of our directors and officers are nationals and/or residents of countries other than the United States, and all or a substantial portion of such persons' assets may be located outside the United States. As a result, it may be difficult for investors to effect service of process within the United States upon us or such persons or to enforce against them or against us, judgments obtained in United States courts, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state thereof. In addition, investors should not assume that the courts of Canada (i) would enforce judgments of U.S. courts obtained in actions against us, our officers or directors, or other said persons, predicated upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States or (ii) would enforce, in original actions, liabilities against us or such directors, officers or experts predicated upon the United States federal securities laws or any securities or other laws of any state or jurisdiction of the United States.

Notwithstanding this, we have also been advised by Osler, Hoskin & Harcourt LLP, that there is doubt whether an action could be brought in Canada in the first instance on the basis of liability predicated solely upon United States federal securities laws.

We have appointed C T Corporation System as our agent to receive service of process with respect to any action brought against us in the United States.

EXPERTS

The financial statements of Acasti as at March 31, 2017 and February 29, 2016, and for the thirteen-month period ended March 31, 2017 and the years ended February 29, 2016 and February 28, 2015, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

The audit report covering those financial statements contains an emphasis of matter paragraph that states that Acasti has incurred operating losses and negative cash flows from operations since inception, that its current assets as at March 31, 2017 are projected to be significantly less than needed and that its future operations are dependent on obtaining additional financing, which, along with other matters as set forth in 2(c) in the financial statements, indicate the existence of a material uncertainty that casts substantial doubt about Acasti's ability to continue as a going concern. The financial statements do not include any adjustments that may be necessary if the going concern basis was not appropriate. The audit report also contains an "other matter" paragraph that states that the financial statements of Acasti as at February 28, 2017 and for the twelve-month and one-month periods ended February 28, 2017 and March 31, 2017 respectively are unaudited and KPMG does not express an opinion on them.

LEGAL MATTERS

Unless otherwise specified in the prospectus supplement relating to any offering of securities under this prospectus, certain matters under Canadian law relating to the offering of the securities under this prospectus will be passed upon for us by Osler, Hoskin & Harcourt LLP, Montreal, Quebec, Canada and certain legal matters under United States law will be passed upon for us by Osler, Hoskin & Harcourt LLP, New York, New York. In addition, certain legal matters in connection with any offering of securities under this prospectus will be passed upon for any underwriters, dealers or agents by counsel to be designated at the time of the offering by such underwriters, dealers or agents with respect to matters of Canadian and United States law.



Up to US\$30,000,000 Common Shares

PROSPECTUS SUPPLEMENT

B. Riley FBR

February 14, 2019