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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

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**POST-EFFECTIVE AMENDMENT NO. 1 TO  
FORM F-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

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**ACASTI PHARMA INC.**

*(Exact name of Registrant as specified in its charter)*

**Québec, Canada**

**2834**

**98-1359336**

*(State or other jurisdiction of incorporation or organization)*

*(Primary Standard Industrial Classification Code Number)*

*(I.R.S. Employer Identification Number)*

**Acasti Pharma Inc.  
545 Promenade du Centropolis, Suite 100  
Laval, Québec, Canada H7T 0A3  
(450) 686-4555**

*(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)*

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**C T Corporation System  
111 Eighth Avenue  
New York, NY 10011  
(212) 894-8940**

*(Name, address, including zip code, and telephone number, including area code, of agent for service)*

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**Copies to:**

**Janelle D'Alvise  
Acasti Pharma Inc.  
545 Promenade de Centropolis, Suite 100  
Laval, Québec  
Canada H7T 0A3  
(450) 687-2262**

**Jason Comerford  
Osler, Hoskin & Harcourt LLP  
620 8th Avenue – 36th Floor  
New York, NY 10018  
(212) 991-2533**

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***Approximate date of commencement of proposed sale to the public:*** As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933.

Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to such Section 8(a), may determine.**

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## **EXPLANATORY NOTE**

On December 19, 2017, the U.S. Securities and Exchange Commission (the “SEC”) declared effective the Registration Statement on Form F-1 (File No. 333-220755) (the “Registration Statement”) of Acasti Pharma Inc. (the “Company”). This Post-Effective Amendment No. 1 to the Registration Statement (the “Post-Effective Amendment”) is being filed pursuant to the undertakings in Item 9 of the Registration Statement to update and supplement the information contained in the Registration Statement to include the information contained in the Company’s Annual Report on Form 20-F for the fiscal year ended March 31, 2018 (the “Annual Report”) that was filed with the SEC on June 29, 2018. No changes have been made to the prospectus contained in the Registration Statement (which prospectus continues to form a part of this Registration Statement) and, accordingly, such prospectus has not been included in Part I of this filing. No additional securities are being registered under this Post-Effective Amendment. All applicable registration fees were paid at the time of the original filing of the Registration Statement.

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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 United States 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 jurisdiction where the offer or sale is not permitted.**

**PROSPECTUS SUPPLEMENT NO. 3  
TO THE PROSPECTUS DATED DECEMBER 21, 2017**



**9,802,935 Common Shares Issuable Upon Exercise of Warrants**

Pursuant to the prospectus dated December 21, 2017, Acasti Pharma Inc. offered up to 9,900,990 common shares, together with warrants (the “initial warrants”) to purchase up to 8,910,891 common shares. As part of the closing, the underwriters also partially exercised their over-allotment option for warrants (the “option warrants” and, together with the initial warrants, the “warrants”) to purchase 892,044 common shares. Delivery of the common shares and the warrants was made on December 27, 2017 and delivery of the warrants pursuant to the exercise of the over-allotment option was made on January 22, 2018. Pursuant to the prospectus, as subsequently supplemented, we are offering 9,802,935 common shares issuable upon exercise of the warrants. The warrants, which have an exercise price of U.S.\$1.26 per share, are currently exercisable and may be exercised at any time on or before December 27, 2022.

**Recent Developments**

We have incorporated by reference into this prospectus supplement our Annual Report on Form 20-F for the fiscal year ended March 31, 2018 (the “Annual Report”) and certain other Current Reports on Form 6-K specified under “Documents Incorporated by Reference.” This prospectus supplement should be read in conjunction with the prospectus dated December 21, 2017, the prospectus supplement No. 1 filed on January 18, 2018 and the prospectus supplement No. 2 filed on February 15, 2018 (collectively, the “Prospectus”). This prospectus supplement updates and supplements the information in the Prospectus. If there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

Our common shares are listed for trading on the NASDAQ Stock Market and the TSX Venture Exchange under the symbol “ACST”. On September 20, 2018, the closing price of our common shares on the NASDAQ Stock Market was U.S.\$0.57 per share and on the TSX Venture Exchange was C\$0.70 per share. There is no established trading market for the warrants. We do not intend to apply for any listing of the warrants on the NASDAQ Stock Market or the TSX Venture Exchange or any other securities exchange or nationally recognized trading system.

**Investing in our securities involves risks. See “Risk Factors” beginning on page 8 of the Prospectus and “Item 3.D. Risk Factors” beginning on page 6 of the Annual Report.**

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

## **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 registration statement 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 covering those financial statements contains an emphasis of matter paragraph that states that Acasti Pharma Inc. has incurred operating losses and negative cash flows from operations since inception, that its current assets as at March 31, 2018 are projected to be significantly less than needed and that it needs to obtain additional financing, which indicate the existence of a material uncertainty that casts substantial doubt about Acasti Pharma Inc.'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 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 KPMG 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 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 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, July 2, 2018, August 1, 2018, August 14, 2018 (Film No.: 181014206), August 29, 2018 and September 18, 2018.

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

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).

**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 6. Indemnification of Directors and Officers**

Directors' and officers' liability insurance has been purchased for the benefit of the directors and officers of the registrant, to back up the registrant's indemnification of them against liability incurred in their capacity as directors and officers, subject to certain limitations under applicable law.

In accordance with the provisions of the *Business Corporations Act* (Québec), the by-laws of the registrant also provide that the registrant will indemnify a director or officer, a former director or officer, or an individual who acts or acted at the registrant's request as a director or officer or an individual acting in a similar capacity of another entity, and such person's heirs and legal representatives, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by such individual in respect of any civil, criminal, administrative investigative or other proceeding in which the individual is involved because of that association with the registrant or other entity, provided however that the registrant shall not so indemnify an individual unless the individual (i) acted honestly and in good faith with a view to the best interests of the registrant or, as the case may be, to the best interests of the other entity for which the individual acted as a director or officer or in a similar capacity at the registrant's request, and (ii) if the matter is a criminal or administrative action or proceeding that is enforced by a monetary penalty, had reasonable grounds for believing that the individual's conduct was lawful.

In addition, the registrant may advance money to a director, officer or other individual for the costs, charges and expenses of a proceeding referred to above, but the individual shall repay the registrant if the individual does not fulfil the conditions set out in (i) and (ii) above.

If the registrant becomes liable under the terms of its by-laws, the insurance coverage discussed above will extend to its liability; however, each claim will be subject to a per claim retention of nil to C\$250,000, depending on the nature of the claim.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or Securities Act, may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the Securities and Exchange Commission, or the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

**Item 7. Recent Sales of Unregistered Securities**

Set forth below are all the sales of securities by us during the three years preceding this offering that were not registered under the Securities Act.

- 50,000 common shares issued on February 5, 2016 pursuant to a settlement agreement;
- \$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;
- warrants issued in connection with our February 2017 public offering in Canada to purchase up to 1,965,259 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 in Canada to purchase up to 234,992 common shares at an exercise price of \$2.15 per common share, at any time until February 21, 2018;
- 60,000 common shares issued in connection with our February 2017 public offering in Canada for services received from an employee of Neptune;
- 9,496 common shares issued on April 7, 2017 in satisfaction of interest payable on the unsecured convertible debentures;
- 23,885 common shares issued on August 15, 2017 in satisfaction of interest payable on the unsecured convertible debentures;
- 22,783 common shares issued on December 27, 2017 in satisfaction of interest payable on the unsecured convertible debentures;
- 33,605 common shares issued on March 27, 2018 in satisfaction of interest payable on the unsecured convertible debentures;

- warrants issued in connection with our May 2018 public offering (including the full exercise of over-allotment option by the underwriters) in Canada to purchase up to 10,959,500 common shares at an exercise price of \$1.31 per common share at any time prior to May 9, 2023;
- 10,959,500 common shares issued in connection with our May 2018 public offering (including the full exercise of over-allotment option by the underwriters) in Canada;
- broker warrants issued in connection with our May 2018 public offering in Canada to purchase up to 547,975 common shares at an exercise price of \$1.05 per common share, with 476,500 and 71,475 of such broker warrants expiring on May 9, 2023 and May 14, 2023 respectively;
- 30,348 common shares issued on June 6, 2018 in satisfaction of interest payable on the unsecured convertible debentures; and
- 51,807 common shares issued on August 21, 2018 in satisfaction of interest payable on the unsecured convertible debentures.

The foregoing issuances were all made outside of the United States pursuant to Regulation S or pursuant to Section 4(a)(2) of the Securities Act.

#### **Item 8. Exhibits and Financial Statement Schedules.**

a. See the Exhibit Index to this registration statement.

b. Financial statement schedules.

All financial statement schedules have been omitted because either they are not required, are not applicable or the information required therein is otherwise set forth in the registrant's financial statements and related notes thereto.

#### **Item 9. Undertakings.**

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the undersigned registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - i. To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
  - ii. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of the securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in the volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and



iii. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement,

*provided, however*, that paragraphs (i), (ii) and (iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) that are incorporated by reference in the registration statement, or, as to a registration statement.

2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
4. That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registration will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- i. Any preliminary prospectus or prospectus of the undersigned registration relating to the offering required to be filed pursuant to Rule 424;
  - ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registration or used or referred to by the undersigned registrant;
  - iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
5. For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
  6. The undersigned registrant hereby undertakes to supplement the prospectus, after the expiration of the subscription period, to set forth the results of the subscription offer, the transactions by the underwriters during the subscription period, the amount of unsubscribed securities to be purchased by the underwriters, and the terms of any subsequent reoffering thereof. If any public offering by the underwriters is to be made on terms differing from those set forth on the cover page of the prospectus, a post-effective amendment will be filed to set forth the terms of such offering.
  7. For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Encinitas, State of California on September 21, 2018.

### ACASTI PHARMA INC.

By: /s/ Janelle D'Alvise  
Name: Janelle D'Alvise  
Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on September 21, 2018.

<u>Signature</u>	<u>Title</u>
<u>/s/ Janelle D'Alvise</u> Janelle D'Alvise	President, Chief Executive Officer and Director (Principal Executive Officer)
<u>*</u> Linda P. O'Keefe	Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)
<u>*</u> Dr. Roderick N. Carter	Chairman of the Board
<u>*</u> Jean-Marie (John) Canan	Director
<u>*By: /s/ Janelle D'Alvise</u> Janelle D'Alvise Attorney-in-fact	

## POWERS OF ATTORNEY

The person whose signature appears below constitutes and appoints Janelle D'Alvise, Linda P. O'Keefe and Pierre Lemieux, or any of them, as his true and lawful attorneys-in-fact and agents, each of whom may act alone, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments to this registration statement, including post-effective amendments, and sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended, and all post-effective amendments thereto and to file the same, with all exhibits thereto, and other documents and in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, and hereby ratifies and confirms all his said attorneys-in-fact and agents or any of them or his substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following person in the capacity indicated on September 21, 2018.

<u>Signature</u>	<u>Title</u>
<u>/s/ Donald Olds</u> Donald Olds	Director

**AUTHORIZED REPRESENTATIVE**

Pursuant to the requirements of Section 6(a) of the Securities Act of 1933, the undersigned has signed this Registration Statement, solely in the capacity of the duly authorized representative of Acasti Pharma Inc. in the United States, on September 21, 2018.

**ACASTI PHARMA INC.**

By: /s/ Janelle D'Alvise

Name: Janelle D'Alvise

Title: Chief Executive Officer

## EXHIBIT INDEX

Exhibit Number	Description
<a href="#"><u>1.1*</u></a>	<a href="#"><u>Form of Underwriting Agreement</u></a>
<a href="#"><u>3.1</u></a>	<a href="#"><u>Articles of Incorporation (incorporated by reference to Exhibit 4.1 from Form S-8 (File No. 333-191383) filed with the Commission on September 25, 2013)</u></a>
<a href="#"><u>3.2</u></a>	<a href="#"><u>Amended and Restated General By-Law (incorporated by reference to Exhibit 99.1 from Form 6-K (File No. 001-35776) filed with the Commission on February 21, 2017)</u></a>
<a href="#"><u>3.3</u></a>	<a href="#"><u>Advance Notice bylaw No. 2013-1 (incorporated by reference to Exhibit 4.3 from Form S-8 (File No. 333-191383) filed with the Commission on September 25, 2013)</u></a>
<a href="#"><u>4.1</u></a>	<a href="#"><u>Specimen Certificate for Common Shares of Acasti Pharma Inc. (incorporated by reference to Exhibit 2.1 from Form 20-F (File No. 001-35776) filed with the Commission on June 6, 2014)</u></a>
<a href="#"><u>4.2</u></a>	<a href="#"><u>Warrant Indenture dated December 3, 2013 between Acasti Pharma Inc. and Computershare Trust Company of Canada (incorporated by reference to Exhibit 99.1 from Form 6-K (File No. 001-35776) filed with the Commission on December 3, 2013)</u></a>
<a href="#"><u>4.3</u></a>	<a href="#"><u>Warrant Indenture dated February 21, 2017 between Acasti Pharma Inc. and Computershare Trust Company of Canada (incorporated by reference to Exhibit 2.3 from Form 20-F (File No. 001-35776) filed with the Commission on June 27, 2017)</u></a>
<a href="#"><u>4.4</u></a>	<a href="#"><u>Warrant Agency Agreement dated December 27, 2017 between Acasti Pharma Inc. and Computershare Inc. and its wholly-owned subsidiary, Computershare Trust Company N.A. (incorporated by reference to Exhibit 2.4 from Form 20-F (File No. 001-35776) filed with the Commission on June 29, 2018)</u></a>
<a href="#"><u>4.5</u></a>	<a href="#"><u>Amended and Restated Warrant Indenture dated May 10, 2018 between Acasti Pharma Inc. and Computershare Trust Company of Canada (incorporated by reference to Exhibit 2.5 from Form 20-F (File No. 001-35776) filed with the Commission on June 29, 2018)</u></a>
<a href="#"><u>5.1*</u></a>	<a href="#"><u>Opinion of Osler, Hoskin &amp; Harcourt LLP</u></a>
<a href="#"><u>10.1</u></a>	<a href="#"><u>License Agreement dated August 7, 2008, as modified on February 20, 2009 and March 7, 2013, between Acasti Pharma Inc. and Neptune Technologies &amp; Bioresources Inc. (incorporated by reference to Exhibit 10.1 from Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017)</u></a>
<a href="#"><u>10.2</u></a>	<a href="#"><u>Prepayment Agreement, dated December 4, 2012, between Acasti Pharma Inc. and Neptune Technologies &amp; Bioresources Inc. (incorporated by reference to Exhibit 10.2 from Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017)</u></a>
<a href="#"><u>10.3</u></a>	<a href="#"><u>Equity Incentive Plan, as amended June 8, 2017 (incorporated by reference to Exhibit 4.2 from Form 20-F (File No. 001-35776) filed with the SEC on June 27, 2017)</u></a>
<a href="#"><u>10.4</u></a>	<a href="#"><u>Stock Option Plan, as amended June 8, 2017 (incorporated by reference to Exhibit 4.3 from Form 20-F (File No. 001-35776) filed with the SEC on June 27, 2017)</u></a>
<a href="#"><u>10.5</u></a>	<a href="#"><u>Employment Agreement with Linda O'Keefe, dated November 25, 2016 (incorporated by reference to Exhibit 10.5 from Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017)</u></a>
<a href="#"><u>10.6</u></a>	<a href="#"><u>Employment Agreement with Janelle D'Alvise, dated May 11, 2016 (incorporated by reference to Exhibit 10.6 from Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017)</u></a>
<a href="#"><u>10.7</u></a>	<a href="#"><u>Employment Agreement with Pierre Lemieux, dated September 26, 2017 (incorporated by reference to Exhibit 10.7 from Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017)</u></a>
<a href="#"><u>10.8</u></a>	<a href="#"><u>Employment Agreement with Laurent Harvey, dated September 26, 2017 (incorporated by reference to Exhibit 10.8 from Form F-1 (File No. 333-220755) filed with the SEC on September 29, 2017)</u></a>
<a href="#"><u>23.1#</u></a>	<a href="#"><u>Consent of KPMG LLP</u></a>

<b>Exhibit Number</b>	<b>Description</b>
<a href="#"><u>23.2*</u></a>	<a href="#"><u>Consent of Osler, Hoskin &amp; Harcourt LLP (included in Exhibit 5.1)</u></a>
<a href="#"><u>24.1</u></a>	<a href="#"><u>Powers of Attorney (included on signature page)</u></a>

\* Previously filed.

# Filed herewith.



**KPMG LLP**  
600 de Maisonneuve Blvd. West  
Suite 1500, Tour KPMG  
Montréal (Québec) H3A 0A3  
Canada

Telephone (514) 840-2100  
Fax (514) 840-2187  
Internet [www.kpmg.ca](http://www.kpmg.ca)

## **EXHIBIT 23.1**

### **CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors of Acasti Pharma Inc.

We consent to the use of our report dated June 27, 2018, with respect to the statements of financial position as at March 31, 2018 and 2017 of Acasti Pharma Inc., the related statements of earnings and comprehensive loss, changes in equity and cash flows for the periods ended March 31, 2018, March 31, 2017 and February 29, 2016, and the related notes (collectively the “financial statements”), incorporated by reference herein, which report appears in the March 31, 2018 annual report on Form 20-F of Acasti Pharma Inc., and to the reference to our firm under the heading “Experts” in the prospectus.

Our report dated June 27, 2018 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.

Our report dated June 27, 2018 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. Accordingly, we do not express an opinion on them.

/s/ KPMG LLP

September 21, 2018

Montréal, Canada

\*CPA auditor, CA, public accountancy permit No. A122596

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative (“KPMG International”), a Swiss entity.  
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