UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 POST-EFFECTIVE AMENDMENT NO. 1

FORM S-4

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ACASTI PHARMA INC.

(Exact name of registrant as specified in its charter)

Delaware	2834	98-1359336
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(State or other jurisdiction of incorporation or organization)

(Primary Standard Industrial Classification Code Number)

(I.R.S. Employer Identification No.)

Acasti Pharma Inc. 103 Carnegie Center, Suite 300 Princeton, New Jersey 08540 (609) 322-1602

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

Prashant Kohli
Chief Executive Officer
Acasti Pharma Inc.
103 Carnegie Center, Suite 300
Princeton, New Jersey 08540
(609) 322-1602

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

Copy to:
Steven J. Abrams
Hogan Lovells US LLP
1735 Market Street, 23rd Floor
Philadelphia, PA 19103
(267) 675-4600

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement is declared effective and all other conditions to the domestication described in the enclosed proxy statement/prospectus have been satisfied or waived.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. \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 earliest effective registration statement for the same offering. \Box

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 a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	
		Emerging growth company	

If an emerging growth company, 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. \Box

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-border Issuer Tender Offer) $\;\Box$

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) □

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 or until this Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (this "Amendment") to Registration Statement No. 333-280536 (the "Registration Statement") is being filed pursuant to Rule 414(d) under the Securities Act of 1933, as amended (the "Securities Act") by Acasti Pharma Inc., a Delaware corporation ("Acasti Delaware"), as the ultimate successor to Acasti Pharma Inc., a corporation previously existing under the laws of the Province of Québec, Canada ("Acasti Québec"), which, as further described below, changed its jurisdiction to the Province of British Columbia, Canada ("Acasti British Columbia") prior to changing its jurisdiction to the State of Delaware. For purposes of this Amendment and the Registration Statement, the terms the "Company," "Acasti," "we," "us" and "our" refer to (i) Acasti Québec, (ii) Acasti British Columbia or (iii) Acasti Delaware, as applicable.

On October 1, 2024, the Company changed its jurisdiction of incorporation from the Province of Québec in Canada to the Province of British Columbia in Canada pursuant to a "continuance" effected in accordance with Chapter XII of the *Business Corporations Act* (Québec) (the "Continuance"). On October 7, 2024, the Company changed its jurisdiction of incorporation from the Province of British Columbia in Canada to the State of Delaware in the United States pursuant to a "continuance" effected in accordance with Section 308 of the *Business Corporations Act* (British Columbia) and a "domestication" (the "Domestication") under Section 388 of the *General Corporation Law* of the State of Delaware (the "DGCL").

The information contained in this Amendment sets forth additional information to reflect the Domestication. All documents filed by the Company under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") before the effective date of the Domestication will not reflect the change in the Company's jurisdiction of incorporation.

Upon effectiveness of the Continuance, each outstanding Class A common share, without par value per share, of Acasti Québec at the time of the Continuance remained issued and outstanding as a common share, without par value per share, of Acasti British Columbia. Furthermore, upon effectiveness of the Domestication, each outstanding common share of Acasti British Columbia at the time of the Domestication automatically became one outstanding share of common stock, par value \$0.0001 per share, of Acasti Delaware. The common stock of Acasti Delaware continues to be listed for trading on The Nasdaq Stock Market LLC under the symbol "ACST."

In connection with the Domestication, the Company continues its obligations under (i) the Acasti Pharma Inc. Stock Option Plan and (ii) the Acasti Pharma Inc. Equity Incentive Plan (together, the "Plans") and all of the outstanding equity awards under the Plans.

Upon effectiveness of the Continuance, each outstanding option, warrant and restricted share unit settleable into Class A common shares of Acasti Québec remained exercisable for or able to be settled into an equivalent number of common shares of Acasti British Columbia for the equivalent exercise price per share (if applicable), without any action by the holder. Upon effectiveness of the Domestication, each outstanding option, warrant and restricted share unit settleable into common shares of Acasti British Columbia remained exercisable for or able to be settled into an equivalent number of shares of common stock of Acasti Delaware for the equivalent exercise price per share (if applicable), without any action by the holder.

The rights of stockholders of the Company are now governed by Delaware law, the certificate of incorporation of the Company (the "Certificate of Incorporation") and the bylaws of the Company (the "Bylaws"), which were adopted in connection with the Domestication. Delaware law, the Certificate of Incorporation and the Bylaws contain provisions that differ in certain respects from Acasti Québec's organizational documents and Québec law and Acasti British Columbia's organizational documents and British Columbia law. A description of the rights of stockholders before and after the Domestication is described in the final prospectus dated August 7, 2024, which was filed with the Securities and Exchange Commission (the "Commission") on August 7, 2024 and is a part of the Company's registration statement on Form S-4 (File No. 333-280536).

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. Indemnification of Directors and Officers.

Set forth below is a description of the DGCL, our Certificate of Incorporation and our Bylaws, as such provisions relate to the indemnification of our directors and officers. This description is intended only as a summary and is qualified in its entirety by reference to the DGCL, our Certificate of Incorporation and our Bylaws.

Section 102(b)(7) of the DGCL generally permits a Delaware corporation to provide in its certificate of incorporation that directors or certain officers of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or officer, except for liability (i) with respect to directors and officers, any breach of the director's or officer's duty of loyalty to the corporation or its stockholders; (ii) with respect to directors and officers, acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (iii) with respect to directors, payments of unlawful dividends or unlawful stock repurchases or redemptions under Section 174 of the DGCL; (iv) with respect to directors and officers, any transaction from which the director or officer derived an improper personal benefit; or (v) with respect to officers, any action by or in the right of the corporation.

Section 145(a) of the DGCL provides, in general, that a Delaware corporation may indemnify any person who is or was a party, or is threatened to be made a party, to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) because that person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, so long as the person acted in good faith and in a manner he or she reasonably believed was in or not opposed to the corporation's best interests, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the DGCL provides, in general, that a Delaware corporation may indemnify any person who is or was a party, or is threatened to be made a party, to any threatened, pending or completed action or suit by or in the right of the corporation to obtain a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action, so long as the person acted in good faith and in a manner the person reasonably believed was in or not opposed to the corporation's best interests, except that no indemnification shall be permitted without judicial approval if a court has determined that the person is to be liable to the corporation with respect to such claim.

Section 145(c) of the DGCL provides that, if a present or former director or officer has been successful in defense of any action referred to in Sections 145(a) and (b) of the DGCL, the corporation must indemnify such officer or director against the expenses (including attorneys' fees) he or she actually and reasonably incurred in connection with such action.

Section 145(g) of the DGCL provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or other enterprise against any liability asserted against and incurred by such person, in any such capacity, or arising out of his or her status as such, whether or not the corporation could indemnify the person against such liability under Section 145 of the DGCL.

The Company's Certificate of Incorporation contains provisions that limit the liability of the Company's directors and officers for monetary damages to the fullest extent permitted by the DGCL. In addition, if the DGCL is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of the Company's directors and officers will be further limited to the greatest extent permitted by the DGCL.

Our Bylaws provide that we will indemnify our directors and officers, and may indemnify our employees, agents and any other persons, to the fullest extent permitted by the DGCL, subject to limited exceptions. Our Bylaws also provide that we must advance expenses incurred by or on behalf of a current or former director or officer in advance of the final disposition of any action or proceeding, subject to limited exceptions.

Further, we have entered into indemnification agreements with each of our directors and executive officers that may be broader than the specific indemnification provisions contained in the DGCL. These indemnification agreements require us, among other things, to indemnify our directors and executive officers against liabilities that may arise by reason of their status or service. These indemnification agreements also require us to advance all expenses reasonably and actually incurred by the directors and executive officers in investigating or defending any such action, suit or proceeding. We believe that these agreements are necessary to attract and retain qualified individuals to serve as directors and executive officers.

Directors' and officers' liability insurance has been purchased for the benefit of our directors and officers to back up the Company's indemnification of them against liability incurred in their capacity as directors and officers, subject to certain limitations under applicable law. We also maintain insurance policies under which our directors and officers are insured, within the limits and subject to the limitations of those policies, against certain expenses in connection with the defense of, and certain liabilities which might be imposed as a result of, actions, suits, or proceedings to which they are parties by reason of being or having been directors or officers of the Company. The coverage provided by these policies may apply whether or not we would have the power to indemnify such person against such liability under the provisions of the DGCL.

Item 21. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Exhibit			
Number	Exhibit Description		
2.1	Agreement and Plan of Merger dated as of May 7, 2021, among Acasti Pharma Inc., Acasti Pharma U.S., Inc. and Grace Therapeutics Inc. (incorporated by		
	reference to Exhibit 2.1 to the Form 8-K (File No. 001-35776) filed with the Commission on May 7, 2021)		
<u>3.1</u>	Acasti Pharma Inc. Certificate of Incorporation (incorporated by reference to Exhibit 3.3 to the Form 8-K (File No. 001-35776) filed with the Commission on October 7, 2024)		
<u>3.2</u>	Acasti Pharma Inc. Bylaws (incorporated by reference to Exhibit 3.4 to the Form 8-K (File No. 001-35776) filed with the Commission on October 7, 2024)		
<u>4.1</u>	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Form 8-K filed with the Commission on October 7, 2024)		

<u>4.2</u>	Form of Common Warrant, dated September 25, 2023 (incorporated by reference to Exhibit 4.1 to the Form 8-K (File No. 001-35776) filed with the Commission on September 26, 2023)
4.3	Form of Pre-Funded Warrant, dated September 25, 2023 (incorporated by reference to Exhibit 4.2 to the Form 8-K (File No. 001-35776) filed with the Commission on September 26, 2023)
<u>5.1*</u>	Opinion of Richards, Layton & Finger, P.A.
8.1**	Tax Opinion of Hogan Lovells US LLP
8.2**	Tax Opinion of Osler, Hoskin & Harcourt LLP
10.1+**	Form of Director and Officer Indemnification Agreement
<u>10.2+</u>	Acasti Pharma Inc. 2024 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Form 8-K (File No. 001-35776) filed with the Commission on September 30, 2024)
10.3+**	Form of 2024 ISO Stock Option Award Agreement
10.4+**	Form of 2024 NSO Stock Option Award Agreement
<u>10.5+</u>	Acasti Pharma Inc., Equity Incentive Plan, as amended August 4, 2022 (incorporated by reference to Schedule B to the definitive proxy statement (File No. 001-35776) filed with the Commission on August 31, 2022)
<u>10.6+</u>	Acasti Pharma Inc., Stock Option Plan, as amended August 4, 2022 (incorporated by reference to Schedule A to the definitive proxy statement (File No. 001-35776) filed with the Commission on August 31, 2022)
<u>10.7+</u>	Form of Stock Option Agreement for Employees under the Acasti Pharma Inc. Stock Option Plan (incorporated by reference to Exhibit 10.1 to the Form 10-Q (File No. 001-35776) filed with the Commission on August 11, 2023)
10.8+	Form of Stock Option Agreement for Non-Employee Directors under the Acasti Pharma Inc. Stock Option Plan (incorporated by reference to Exhibit 10.2 to the Form 10-Q (File No. 001-35776) filed with the Commission on August 11, 2023)
<u>10.9+</u>	Offer Letter by and between Robert J. DelAversano and the Company, dated November 21, 2023 (incorporated by reference to Exhibit 10.1 to the Form 8-K (File No. 001-35776) filed with the Commission on January 8, 2024)
10.10	Settlement Agreement, dated October 18, 2023, by and between the Company and Aker BioMarine Antarctic AS (incorporated by reference to Exhibit 10.1 from Form 8-K (File No. 001-35776) filed with the Commission on October 23, 2023)
<u>10.11</u>	Form of Securities Purchase Agreement, dated September 24, 2023, by and between Acasti Pharma Inc. and each of the Purchasers signatory thereto (incorporated by reference to Exhibit 10.1 from Form 8-K (File No. 001-35776) filed with the Commission on September 26, 2023)
<u>16.1</u>	Letter from KPMG LLP (Canada), dated February 22, 2023 (incorporated by reference to Exhibit 16.1 from Form 8-K (File No. 001-35776) filed with the Commission on February 22, 2023)
<u>16.2</u>	Letter from Ernst & Young LLP (Canada), dated December 15, 2023 (incorporated by reference to Exhibit 16.1 from Form 8-K (File No. 001-35776) filed with the Commission on December 15, 2023)

<u>21.1</u>	List of Subsidiaries (incorporated by reference to Exhibit 21.1 from Form 10-K (File No. 001-35776) filed with the Commission on June 21, 2024)
23.1*	Consent of KPMG LLP, independent registered public accounting firm
<u>25.1 </u>	Consent of Re 1916 EEE, independent registered public decounting in in
23.2*	Consent of Ernst & Young LLP, independent registered public accounting firm
23.3*	Consent of Richards, Layton & Finger, P.A. (included in Exhibit 5.1)
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23.4**	Consent of Hogan Lovells US LLP (included in Exhibit 8.1)
23.5**	Consent of Osler, Hoskin & Harcourt LLP (included in Exhibit 8.2)
24.1**	Down of Assert of Cost of the sign of the sign of the Decision (Cost on the State of Cost of C
24.1**	Power of Attorney (set forth on the signature page to this Registration Statement on Form S-4)

107** Filing Fee Calculation Table

- + Indicates a management contract or compensatory plan.
- Filed herewith.
- ** Previously filed as an exhibit to the Registration Statement on Form S-4 filed with the Commission on June 27, 2024, as amended on July 31, 2024.

Item 22. Undertakings.

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to the registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (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 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 volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Filing Fee Tables" or "Calculation of Registration Fee Table," as applicable, in the effective registration statement.
 - (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;
 - (2) That, for the purpose of determining any liability under the Securities Act, 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 purposes of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
 - (5) 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 registrant 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 registrant 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 registrant 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.
- (b) That, for the purpose of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement 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.
- (c) The undersigned registrant hereby undertakes as follows: that prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other Items of the applicable form.
- (d) The registrant undertakes that every prospectus (i) that is filed pursuant to paragraph (c)(1) immediately preceding, or (ii) that purports to meet the requirements of section 10(a)(3) of the Securities Act and is used in connection with an offering of securities subject to Rule 415 (§ 230.415 of this chapter), will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective, and that, for purposes of determining any liability under the Securities Act, 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.
- (e) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act 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, and will be governed by the final adjudication of such issue.
- (f) The undersigned Registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Item 4, 10(b), 11 or 13 of this Form S-4, within one business day of receipt of such request, and to send the incorporated documents by first Class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of this Registration Statement through the date of responding to the request.
- (g) The undersigned Registrant hereby undertakes to supply by means of a post-effective amendment all information concerning this transaction that was not the subject of and included in this Registration Statement when it became effective.

SIGNATURES

Pursuant to the requirements of the Securities Act, Acasti Pharma Inc. has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Princeton, State of New Jersey, on October 8, 2024.

ACASTI PHARMA INC.

By: /s/Prashant Kohli

Name: Prashant Kohli
Title: Chief Executive Officer

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

Signature	Title	Date
/s/ Prashant Kohli Prashant Kohli	Chief Executive Officer and Director (Principal Executive Officer)	October 8, 2024
/s/ Robert DelAversano Robert DelAversano	Vice President, Finance (Principal Financial and Accounting Officer)	October 8, 2024
* Vimal Kavuru	Director, Chairman	October 8, 2024
* Brian Davis	Director	October 8, 2024
* George Kottayil	Director	October 8, 2024
* Edward Neugeboren	Director	October 8, 2024
* By: /s/ Prashant Kohli Prashant Kohli Attorney-in-Fact		



October 8, 2024

and

Acasti Pharma Inc. 103 Carnegie Center, Suite 300 Princeton, New Jersey 08540

Re: Acasti Pharma Inc.

Dear Ladies and Gentlemen:

We are acting as special Delaware counsel to Acasti Pharma Inc., a Delaware corporation (as domesticated, the "Company"), and immediately prior to domesticating to the State of Delaware from the Province of British Columbia, Canada (the "Domestication"), formerly a corporation organized under the laws of the Province of British Columbia, Canada (as the Company existed immediately prior to the Domestication, "Acasti"), and have been requested to furnish this opinion to you in connection with the Domestication. The Domestication was effected pursuant to the provisions of Section 388 of the General Corporation Law of the State of Delaware (the "General Corporation Law"), 8 <u>Del. C.</u> § 388 ("Section 388"), by filing the Certificate of Domestication and the Certificate of Incorporation (as such terms are defined below) with the Secretary of State of the State of Delaware (the "Secretary of State").

For the purpose of rendering our opinions as stated herein, we have been furnished and have reviewed the following documents:

- (i) the Certificate of Incorporation of the Company filed with the Secretary of State on October 7, 2024 (the "Certificate of Incorporation");
- (ii) the Certificate of Corporate Domestication of the Company filed with the Secretary of State on October 7, 2024 (the "Certificate of Domestication");

(iii) a certificate of the Secretary of State, dated October 7, 2024, as to the good standing of the Company.

Acasti Pharma Inc. October 8, 2024 Page 2

With respect to the foregoing documents, we have assumed: (a) the genuineness of all signatures, and the incumbency, authority, legal right and power and legal capacity under all applicable laws and regulations, of the officers and other persons and entities signing each of said documents as or on behalf of the parties thereto; (b) the authenticity of all documents submitted to us as originals; and (c) the conformity to authentic originals of all documents submitted to us as certified, conformed, photostatic or other copies. For the purpose of rendering our opinions as expressed herein, we have not reviewed any document other than the documents set forth above, and we assume there exists no provision of any such other document that bears upon or is inconsistent with our opinions as expressed herein. We have conducted no independent factual investigation of our own, but rather have relied solely upon the foregoing documents, the statements and information set forth therein, and the additional matters recited or assumed herein, all of which we assume to be true, complete and accurate in all material respects.

In addition to the foregoing, for the purpose of rendering our opinions as expressed herein, we have, with your consent, assumed the following matters:

- (a) that, prior to the Domestication, Acasti validly effected the proposed change in jurisdiction of incorporation from the Province of Québec, Canada to the laws of the Province of British Columbia, Canada, pursuant to a continuance effected in accordance with Chapter XII of the Business Corporations Act (Québec) and, therefore, immediately prior to the Domestication, Acasti was duly organized, validly existing and in good standing under the laws of the Province of British Columbia;
- (b) that, immediately prior to the Domestication, Acasti had the full power, authority and legal right under the laws of British Columbia to domesticate in the State of Delaware pursuant to Section 388;
- (c) that, at all times relevant for purposes of rendering our opinions as expressed herein, the laws of the Province of British Columbia permitted Acasti to domesticate in the State of Delaware pursuant to Section 388;
- (d) that, prior to the Domestication, the Domestication pursuant to Section 388 was duly approved in the manner provided for by the document, instrument, agreement or other writing, as the case may be, governing the internal affairs of Acasti and the conduct of its business and as provided for by the laws of the Province of British Columbia and the Certificate of Incorporation was approved by the same authorization required to approve the Domestication;
- (e) that, prior to the Domestication, all necessary action was taken under the applicable laws of the Province of British Columbia to authorize and permit Acasti to domesticate in the State of Delaware pursuant to Section 388 and any and all consents, approvals and authorizations from applicable British Columbia governmental authorities required to authorize and permit Acasti to domesticate in the State of Delaware pursuant to Section 388 were obtained; and
- (f) that at the effective time of the Domestication, under the laws of the Province of British Columbia, Acasti domesticated to the State of Delaware and ceased to exist as a corporation organized under the laws of the Province of British Columbia.

Acasti Pharma Inc. October 8, 2024 Page 2

Based upon and subject to the foregoing and upon our review of such matters of law as we have deemed necessary and appropriate in order to render our opinions as expressed herein, and subject to the assumptions, exceptions, limitations and qualifications set forth herein, it is our opinion that that the Company is domesticated as a corporation in the State of Delaware and, pursuant to the Certificate of Incorporation and as a result of the Domestication, each common share, no par value per share, of Acasti validly issued and outstanding under the laws of the Province of British Columbia immediately prior to the effective time of the Domestication automatically became one validly issued, fully paid and non-assessable share of common stock, par value \$0.0001 per share, of the Company.

We are admitted to practice law in the State of Delaware and do not hold ourselves out as being experts on the law of any other state or jurisdiction. The foregoing opinions are limited to the General Corporation Law, and we have not considered and express no opinion on the effect of any other laws or the laws of any other state or jurisdiction, including state or federal laws relating to securities or other federal laws, or the rules and regulations of stock exchanges or of any other regulatory body. We express no opinion on the effect of applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar laws affecting creditors' rights generally, principles of equity, or considerations of public policy. In addition, we have not considered and express no opinion as to the applicability of or any compliance with the Delaware Securities Act, 6 Del. C. § 73-101 et seq., or any rules or regulations promulgated thereunder.

We consent to the filing of this opinion with the Securities and Exchange Commission as an exhibit to the Post-Effective Amendment to the Registration Statement of the Company on Form S-4. In giving the foregoing consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission thereunder. Except as stated above, without our prior written consent, this opinion may not be furnished or quoted to, or relied upon by, any other person for any purpose.

Very truly yours,

/s/ Richards, Layton & Finger, P.A.

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated June 21, 2024, with respect to the consolidated financial statements of Acasti Pharma Inc., incorporated herein by reference, and to the reference to our firm under the heading "Experts" in the prospectus.

/s/ KPMG LLP

Philadelphia, Pennsylvania October 8, 2024

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the incorporation by reference of our report dated June 23, 2023, except for the effects of the reverse stock split described in Note 1, as to which the date is June 21, 2024, in amendment No.1 to Form S-4 (Form S-4 No. 333-280536) of Acasti Pharma Inc.

/s/ Ernst & Young LLP

Montréal, Canada October 8, 2024