

## INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * Lemieux Pierre (Last) (First) (Middle) C/O ACASTI PHARMA INC., 545 PROMENADE DU CENTROPOLIS, SUITE 100 (Street) LAVAL, A8 H7T 0A3 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 04/01/2020	3. Issuer Name and Ticker or Trading Symbol Acasti Pharma Inc. [ACST]		
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) COO & CSO		5. If Amendment, Date Original Filed (Month/Day/Year)
		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person		

### Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Common Shares	7,000	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

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### Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Share Option (Right to Buy)	(1)	06/01/2022	Common Shares	16,900	\$ 4.5 (10)	D	
Share Option (Right to Buy)	(2)	05/30/2023	Common Shares	31,400	\$ 1.99 (10)	D	
Share Option (Right to Buy)	(3)	02/24/2027	Common Shares	50,000	\$ 1.65 (10)	D	
Share Option (Right to Buy)	(4)	06/14/2027	Common Shares	93,000	\$ 1.77 (10)	D	
Share Option (Right to Buy)	(5)	06/14/2027	Common Shares	62,000	\$ 1.77 (10)	D	
Share Option (Right to Buy)	(6)	07/02/2028	Common Shares	365,515	\$ 0.77 (10)	D	
Share Option (Right to Buy)	(7)	04/15/2029	Common Shares	79,300	\$ 1.28 (10)	D	
Share Option (Right to Buy)	(8)	04/15/2029	Common Shares	270,700	\$ 1.28 (10)	D	
Share Option (Right to Buy)	(9)	03/31/2030	Common Shares	587,000	\$ 0.53 (10)	D	

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other

Lemieux Pierre C/O ACASTI PHARMA INC. 545 PROMENADE DU CENTROPOLIS, SUITE 100 LAVAL, A8 H7T 0A3			COO & CSO	
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## Signatures

/s/ Kelsey Weiner, Attorney-in-Fact		04/01/2020
<small>**Signature of Reporting Person</small>		<small>Date</small>

## Explanation of Responses:

\* If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

- (1) Represents 16,900 common shares underlying 16,900 share options granted on June 1, 2015. These share options vested in 12 equal installments on a quarterly basis starting from June 1, 2015 until June 1, 2018.
- (2) Represents 31,400 common shares underlying 31,400 share options granted on May 30, 2016. These share options vested in 12 equal installments on a quarterly basis starting from May 30, 2016 until May 30, 2019.
- (3) Represents 50,000 common shares underlying 50,000 share options granted on February 24, 2017. These share options vested in 12 equal installments on a quarterly basis starting from February 24, 2017 until February 24, 2020.
- (4) Represents 93,000 common shares underlying 93,000 share options granted on June 14, 2017. These share options vest in 12 equal installments on a quarterly basis starting from June 14, 2017 until June 14, 2020.
- (5) Represents 62,000 common shares underlying 62,000 share options granted on June 14, 2017. These share options vest in 12 equal installments on a quarterly basis starting from June 14, 2017 until June 14, 2020.
- (6) Represents 365,515 common shares underlying 365,515 share options granted on July 2, 2018. These share options vest in 12 equal installments on a quarterly basis starting from July 2, 2018 until July 2, 2021.
- (7) Represents 79,300 common shares underlying 79,300 share options granted on April 15, 2019. These share options vest in 12 equal installments on a quarterly basis starting from April 15, 2019 until April 15, 2022.
- (8) Represents 270,700 common shares underlying 270,700 share options granted on April 15, 2019. These share options vest in 12 equal installments on a quarterly basis starting from April 15, 2019 until April 15, 2022.
- (9) Represents 587,000 common shares underlying 587,000 share options granted on March 31, 2020. These share options vest in 12 equal installments on a quarterly basis starting from March 31, 2020 until March 31, 2023.
- (10) Canadian dollars.

### Remarks:

Exhibit List - Exhibit 24 - Power of Attorney

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS that the undersigned hereby constitutes, designates and appoints Janelle D'Alvise, Jean-Francois Boily, Francois Paradis, Jason Comerford, Jie Chai and Kelsey Weiner as such person's true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution and full power to act alone and without the other, for the undersigned and in the undersigned's name, place and stead, in any and all capacities, to:

(a) prepare, execute in the undersigned's name and on the undersigned's behalf, and submit to the U.S. Securities and Exchange Commission (the "SEC") a Form ID (or any successor form), including amendments thereto, and any other documents necessary or appropriate to obtain codes and passwords enabling the undersigned to make electronic filings with the SEC of reports required by Section 16(a) or any rule or regulation of the SEC promulgated thereunder;

(b) execute for and on behalf of the undersigned, in the undersigned's capacity as an officer and/or director of Acasti Pharma Inc. (the "Company"), Forms 3, 4, and 5 in accordance with Section 16(a) of the Securities Exchange Act of 1934 and the rules thereunder (or any successor forms);

(c) do and perform any and all acts for and on behalf of the undersigned which may be necessary or desirable to complete and execute any such Form 3, 4, or 5, complete and execute any amendment or amendments thereto, and timely file such form with the SEC and any stock exchange or similar authority; and

(d) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best interest of, or legally required by, the undersigned, it being understood that the documents executed by such attorney-in-fact on behalf of the undersigned pursuant to this Power of Attorney shall be in such form and shall contain such terms and conditions as such attorney-in-fact may approve in such attorney-in-fact's discretion.

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary, or proper to be done in the exercise of any of the rights and powers herein granted, as fully to all intents and purposes as the undersigned might or could do if personally present, with full power of substitution or revocation, hereby ratifying and confirming all that such attorney-in-fact, or such attorney-in-fact's substitute or substitutes, shall lawfully do or cause to be done by virtue of this power of attorney and the rights and powers herein granted. The undersigned acknowledges that the foregoing attorneys-in-fact, in serving in such capacity at the request of the undersigned, are not assuming, nor is the Company assuming any of the undersigned's responsibilities to comply with Section 16 of the Securities Exchange Act of 1934.

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Forms 3, 4, and 5 with respect to the undersigned's holdings of and transactions in securities issued by the Company, unless earlier revoked by the undersigned in a signed writing delivered to the foregoing attorneys-in-fact, except that in respect of any person herein appointed as an attorney-in-fact of the undersigned, this Power of Attorney shall be revoked and shall cease to be effective immediately with respect to such person at such time as such person shall no longer be employed by any of the Company and its subsidiaries.

[Signature Page Follows]

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IN WITNESS WHEREOF, the undersigned has executed this instrument as of the 1st day of April, 2020.

Name: Pierre Lemieux

/s/ Pierre Lemieux\_\_\_\_\_