SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER
Pursuant to Rule 13a-16 or 15d-16 under
the Securities Exchange Act of 1934

For the month of: May 2017

Commission File Number: 001-35776

ACASTI PHARMA INC.

(Name of Registrant)

545 Promende du Centropolis
Suite 100
Laval, Québec
Canada H7T 0A3
(Address of Principal Executive Office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes ☐ No ☒

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): N/A

This Report on Form 6-K including the exhibits hereto shall be deemed to be incorporated by reference into Acasti Pharma Inc.'s registration statement on Form S-8 (File No. 333-191383) and to be a part thereof from the date on which this report is furnished, to the extent not superseded by documents or reports subsequently filed or furnished.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ACASTI PHARMA INC.

Date: May 31, 2017

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

EXHIBIT INDEX

Exhibit	Description of Exhibit
99.1	Press Release dated May 31, 2017

Exhibit 99.1

Acasti Pharma and CordenPharma Announce Large Scale Production of CaPre® with New Continuous Manufacturing Process

Laval, Québec, CANADA – May 31, 2017 – Acasti Pharma Inc. (NASDAQ:ACST – TSX-V:ACST) today announced the achievement of a major corporate milestone by manufacturing the first cGMP batches of CaPre®, Acasti's omega-3 pharmaceutical product candidate, produced with a proprietary and innovative continuous manufacturing process developed in partnership with CordenPharma. CaPre is a potentially best-in-class omega-3 drug derived of krill oil and being developed for the treatment of patients with hypertriglyceridemia, a metabolic condition that contributes to the risk of cardiovascular disease and pancreatitis. The process was jointly designed and implemented by the Acasti and CordenPharma technical teams and engineers at the CordenPharma Chenôve facility in Dijon, France.

"The development and implementation of this continuous manufacturing production line is evidence of the terrific progress Acasti is making as we prepare to initiate Phase 3 trials of CaPre in late 2017," said Pierre Lemieux, Ph.D., chief operating officer of Acasti Pharma. "It was a successful joint effort involving Acasti and CordenPharma to design and execute a process that paves the way for the development and future commercial manufacturing of CaPre as a potential treatment for patients with severe hypertriglyceridemia. This is an important milestone in Acasti Pharma's program to develop and commercialize CaPre."

This continuous manufacturing process allows for the production of CaPre with an increased throughput and a small equipment footprint. The process is designed to purify the bioactive molecules of the raw krill oil through continuous and consecutive decantations. This approach will enable improved quality control and cGMP compliance, while reducing energy consumption, waste and raw material, in a cost-effective manner that aligns with the FDA's championing of robust, flexible and efficient continuous manufacturing processes.

"We worked closely with Acasti Pharma to design and engineer a unique and innovative continuous manufacturing process for CaPre," said Yves Michon, chief executive officer of CordenPharma Chenôve. "This process has been installed at CordenPharma Chenôve and will allow us to efficiently scale-up the volume of CaPre needed for Acasti's Phase 3 trial and early commercial demand. We are honored to continue working with them."

About Acasti Pharma

Acasti Pharma is a biopharmaceutical innovator advancing a potentially best-in-class cardiovascular drug, CaPre (omega-3 phospholipid), for the treatment of hypertriglyceridemia, a chronic condition affecting an estimated one third of the U.S. population. The corporation's strategy is to initially develop and commercialize CaPre for the 3 to 4 million patients in the U.S. with severe hypertriglyceridemia. Since its founding in 2008, Acasti Pharma has focused on addressing a critical market need for an effective, safe and well-absorbing omega-3 therapeutic that can make a positive impact on the major blood lipids associated with cardiovascular disease risk. For more information, visit www.acastipharma.com.

About CordenPharma

CordenPharma, the global pharmaceutical service & manufacturing platform of International Chemical Investors Group (ICIG), is a full-service partner in the Contract Development & Manufacturing (CDMO) of APIs, Drug Products, and associated Packaging Services. Through a network of fully-inspected cGMP facilities across Europe and the US organized under five Technology Platforms – Peptides, Oligonucleotides, Lipids & Carbohydrates; Injectables; Highly Potent & Oncology; Small Molecules; and Antibiotics, CordenPharma experts translate complex processes, ideas and projects at any stage of development into high-value products. For more information visit www.cordenpharma.com. Inquiries: www.cordenpharma.com/contact-us/

CordenPharma Chenôve is a cGMP manufacturer of APIs and advanced pharmaceutical intermediates, specializing in the design of synthetic routes and development processes for new products from laboratory to commercial scale, with equipment and chemical technologies that are particularly suitable for multi-step synthesis. www.cordenpharma.com/facilities/chenove/

Forward Looking Statements

Statements in this press release that are not statements of historical or current fact constitute "forward looking statements" within the meaning of the U.S. securities laws and Canadian securities laws. Such forward-looking statements involve known and unknown risks, uncertainties, and other unknown factors that could cause the actual results of Acasti to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. In addition to statements which explicitly describe such risks and uncertainties, readers are urged to consider statements labeled with the terms "believes," "belief," "expects," "intends," "anticipates," "will," or "plans" to be uncertain and forward-looking. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this press release.

The forward-looking statements contained in this news release are expressly qualified in their entirety by this cautionary statement and the "Cautionary Note Regarding Forward-Looking Information" section contained in Acasti's latest Annual Information Form, which also forms part of Acasti's latest annual report on Form 20-F, and which is available on SEDAR at www.sedar.com, on EDGAR at www.sec.gov/edgar.shtml and on the investor section of Acasti's website at acastipharma.com (the "AIF"). All forward-looking statements in this press release are made as of the date of this press release. Acasti does not undertake to update any such forward-looking statements whether as a result of new information, future events or otherwise, except as required by law. The forward-looking statements contained herein are also subject generally to other risks and uncertainties that are described from time to time in Acasti's public securities filings with the Securities and Exchange Commission and the Canadian securities commissions. Additional information about these assumptions and risks and uncertainties is contained in the AIF under "Risk Factors."

Neither NASDAQ, the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accept responsibility for the adequacy or accuracy of this release.

SOURCE: Acasti Pharma Inc.

Acasti Contact:
Jan D'Alvise
Chief Executive Officer
450-686-4555
info@acastipharma.com
www.acastipharma.com

CordenPharma Contact:
Abby Thompson
Global Marketing Communications Manager
T +1 617 909 5312
abby.thompson@cordenpharma.com
www.cordenpharma.com

Acasti Media & Investor Contact:
Jessica Dyas
Canale Communications
619-849-5385
jessica@canalecomm.com