UNITED STATES 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 September 2018

Commission File Number: 001-35776

ACASTI PHARMA INC.

(Translation of registrant's name into English)

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 [X] 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):

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S-8 (File No. 333-191383) and to be a part thereof from the date on which this report is furnished, to the extent not superseded by documents or reports subsequently filed or furnished.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: September 24, 2018 By: /s/ Jan D'Alvise

Name: Jan D'Alvise

Title: Chief Executive Officer

EXHIBIT INDEX

Exhibit Description of Exhibit

99.1 Press Release dated September 24, 2018

Acasti Pharma Appoints Jean-François Boily as Vice President of Finance

Announces Planned Retirement of Current CFO Linda O'Keefe

LAVAL, Québec, Sept. 24, 2018 (GLOBE NEWSWIRE) -- Acasti Pharma Inc. (NASDAQ: ACST – TSX-V: ACST) (the "Company" or "Acasti"), a biopharmaceutical innovator focused on the research, development and commercialization of its prescription drug candidate CaPre® (omega-3 phospholipid) for the treatment of severe hypertriglyceridemia, today announced the appointment of Jean-François Boily, CPA, as Vice President of Finance, and the planned retirement of Linda O'Keefe, Acasti's current CFO, who will retire later this year.

Prior to joining Acasti, Jean-François Boily served as a Director of Finance & Information Technology (IT) at Innovaderm Research Inc., a large North American contract research organization (CRO) specialized in dermatology. At Innovaderm he worked closely with the President and Chief Medical Officer and founder, where he was responsible for all aspects of Finance and IT. He undertook a major financial, IT and growth mandate where he increased revenues and profits over 25%. Prior to that, Mr. Boily was a Director of Finance at Teva Canada, a generic drug products manufacturer, where he oversaw manufacturing of generics, managing branded product launches and clinical R&D activities. At Teva, Mr. Boily worked closely with the CFO, where he had oversight of four production sites that generated more than four billion doses. Most recently, Mr. Boily worked as a consultant and Vice President of Finance and IT for a pharmaceutical start-up led by a US-based investor, where he helped raise seed capital in advance of a planned initial public offering in Canada and the US. Mr. Boily holds a BS in Accounting from HEC Montreal, a top ranked Canadian business school, and is a Chartered Public Accountant (CPA).

Jan D'Alvise, president and CEO of Acasti Pharma, commented, "We are very pleased to have Jean-Francois join the Acasti team as our VP of Finance, where he will provide financial leadership to the company, take over the reigns of the back-office team, and provide for an orderly transition with Linda. Jean-Francois is an experienced corporate finance executive with a strong background in accounting and pharma operations in commercial stage companies. He will be a valuable asset to Acasti as we advance our prescription drug candidate, CaPre, towards a planned commercial launch around the world. On behalf of the entire Acasti team, we would like to thank Linda for all of her excellent work. Over the last two years she successfully built an independent finance and accounting team for Acasti, and implemented financial reporting best practices as an independent company. We deeply appreciate Linda's many contributions to the Company during her tenure, and we wish her the very best as she begins her planned retirement."

In connection with his appointment, Acasti also announces the grant to Mr. Boily of options to acquire a total of 200,000 common shares of the Company at an exercise price of CAD\$0.78 per share, such options to vest evenly and on a quarterly basis over three years. The options expire ten years from the date of grant.

About CaPre (omega-3 phospholipid)

Acasti's prescription drug candidate, CaPre, is a highly purified omega-3 phospholipid concentrate derived from krill oil and is being developed to treat severe hypertriglyceridemia, a metabolic condition that contributes to increased risk of cardiovascular disease and pancreatitis. Its omega-3s, principally EPA and DHA, are either "free" or bound to phospholipids that allows for better absorption into the body. Acasti believes that EPA and DHA are more efficiently transported by phospholipids sourced from krill oil than the EPA and DHA contained in fish oil that are transported either by triglycerides (as in dietary supplements) or as ethyl esters in other prescription omega-3 drugs, which must then undergo additional digestion before they are ready for transport in the bloodstream. Acasti's CaPre Phase 3 program is currently underway.

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. 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. The company is developing CaPre in a Phase 3 clinical program in patients with severe hypertriglyceridemia, a market that includes 3 to 4 million patients in the U.S. The addressable market may expand significantly if omega-3s demonstrate long-term cardiovascular benefits in on-going outcomes studies (REDUCE-IT and STRENGTH). Acasti may need to conduct at least one additional clinical trial to support FDA approval of a supplemental New Drug Application to expand CaPre's indications to this segment. Acasti's strategy is to commercialize CaPre in the U.S. and the company is pursuing development and distribution partnerships to market

CaPre in major countries around the world. For more information, visit www.acastipharma.com.

Forward Looking Statements

Statements in this press release that are not statements of historical or current fact constitute "forward-looking information" within the meaning of Canadian securities laws and "forward-looking statements" within the meaning of U.S. federal securities laws (collectively, "forward-looking statements"). 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," "potential," "should," "may," "will," "plans," "continue" or other similar expressions 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. Forward-looking statements in this press release include, but are not limited to, information or statements about Acasti's strategy, future operations, prospects and the plans of management; Acasti's ability to conduct all required clinical and non-clinical trials for CaPre, including the timing and results of those trials; CaPre's potential to become the "best-inclass" cardiovascular drug for treating severe Hypertriglyceridemia (HTG), and Acasti's ability to commercially launch CaPre.

The forward-looking statements contained in this press release are expressly qualified in their entirety by this cautionary statement, the "Cautionary Note Regarding Forward-Looking Information" section contained in Acasti's latest annual report on Form 20-F and most recent management's discussion and analysis (MD&A), which are 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 www.acastipharma.com. 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 assumptions and 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, including Acasti's latest annual report on Form 20-F and most recent MD&A.

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

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