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 May 2015.

Commission File Number: 001-35776

Acasti Pharma Inc.

(Translation of registrant's name into English)

545 PROMENADE DU CENTROPOLIS, SUITE 100

LAVAL QUEBEC 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):

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

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):

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

On May 27, 2015 the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

(c) Exhibit 99.1. Press release dated May 27, 2015

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. (Registrant)

/s/ JEAN-DANIEL BELANGER

Jean-Daniel Belanger Corporate Secretary

Date: May 27, 2015

Acasti Announces Fourth Quarter and Fiscal Year Results

LAVAL, Quebec,, May 27, 2015 (GLOBE NEWSWIRE) -- Acasti Pharma Inc. (" Acasti" or the "Corporation") (Nasdaq:ACST) (TSX-V:APO), an emerging biopharmaceutical company focused on the research, development and commercialization of new krill oil-based forms of omega-3 phospholipid therapies for the treatment and prevention of certain cardiometabolic disorders, announces its operating and financial results for the fourth quarter and fiscal year ended February 28, 2015.

"Acasti continues to focus on the clinical development of CaPre®," highlighted Pierre Lemieux, PhD, Acasti's Chief Operating Officer. "Following receipt of data for our Phase I PK Study and our Phase II clinical trials – COLT and TRIFECTA – we provided a data package to the US Food and Drug Administration (FDA) to receive direction and confirmation on requirements for our pivotal Phase III trial." The trial is to be pursued under an Investigational New Drug (IND) application.

Acasti is now corresponding with the FDA to determine next steps in the clinical development of CaPre®, and obtain the required authorizations to proceed with such steps, including initiating a Phase III clinical trial. Such correspondence is meant to allow the FDA to provide feedback on Acasti's submissions and to answer specific questions on such submissions. Prior to a final response from the FDA, any exchange with them can take the form of written correspondence, discussions and potentially face-to-face meetings. The Company is working to respond to FDA feedback and will be working with them to determine resolution and direction needed to advance to Phase III.

Fourth Quarter Financial Results

- Revenues were \$178,000 for the quarter ended February 28, 2015, versus \$201,000 for the quarter ended February 28, 2014
- Research and development (R&D) expenses were \$1,751,000 for the quarter, up from \$714,000 in the prior year
- Adjusted EBITDA¹ was negative (2,263,000) for the quarter, versus negative (977,000) in the prior year
- Net loss was \$(2,311,000) or \$(0.02) per share for the quarter, versus a net loss of \$(2,553,000) or \$(0.02) per share in the prior year.

Sales in both years were generated from the commercialization of Onemia[®], the Corporation's medical food product. Acasti relies on a limited number of distributors and clients and therefore revenues may vary significantly from quarter to quarter.

R&D expenses came in higher for the current quarter largely due to an increase in contract expenses and professional fees related to Acasti's clinical trials.

The year-over-year decline in adjusted EBITDA was largely due to higher R&D expenses.

¹ See comment on Adjusted EBITDA which follows

Fiscal Year Financial Results

- Revenues were \$271,000 for the fiscal year ended February 28, 2015, versus \$501,000 for the year ended February 28, 2014
- Research and development expenses were \$6,522,000 for the year, up from \$4,297,000 in the prior year
- Adjusted EBITDA was negative \$(8,506,000) for the year, versus negative \$(5,584,000) in the prior year
- A net loss of \$(1,655,000) or \$(0.02) per share was recorded for the year, versus a net loss of \$(11,612,000) or \$(0.14) per share in the prior year.

The year-over-year variances for the fiscal year are mainly attributable to the same factors highlighted above for the three-months ended February 28, 2015.

As well, the lower net loss for the current year is largely due to a decrease in the fair value of Acasti's derivative warrant liability arising from its 2013 public offering. The warrants are derivative liabilities, for accounting purposes, due to the currency of the exercise price (US dollars) being different from Acasti's functional currency (Canadian dollars). The derivative warrant liabilities are required to be measured at fair value at each reporting date with changes in fair value recognized in earnings. The Corporation uses the Black-Scholes pricing model to determine fair value.

Adjusted EBITDA

Acasti uses Adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("Adjusted EBITDA") to compare its operating results from one period to another. It is a non-IFRS financial measure. Acasti obtains its Adjusted EBITDA measurement by adding to net loss, finance costs, depreciation and amortization and income taxes and by subtracting finance income. Finance income/costs include foreign exchange gain (loss) and change in fair value of derivatives. Acasti also excludes the effects of certain non-monetary transactions recorded, such as stock-based compensation, from its Adjusted EBITDA calculation. The Corporation believes it is useful to exclude this item as it is a non-cash expense. Excluding this item does not imply it is necessarily nonrecurring.

The Corporation uses Adjusted EBITDA to measure its performance from one period to the next without the variation caused by certain adjustments that could potentially distort the analysis of trends in our operating performance, and because the Corporation believes it provides meaningful information on the Corporation's financial condition and operating results. Acasti's method for calculating adjusted EBITDA may differ from that used by other corporations.

About Acasti Pharma Inc.

Acasti is an emerging biopharmaceutical company focused on the research, development and commercialization of new krill oil-based forms of omega-3 phospholipid therapies for the treatment and prevention of certain cardiometabolic disorders, in particular abnormalities in blood lipids, also known as dyslipidemia. Because krill feeds on phytoplankton (diatoms and dinoflagellates), it is a major source of phospholipids and polyunsaturated fatty acids ("PUFAs"), mainly eicosapentaenoic acid ("EPA") and docosahexaenoic acid ("DHA"), which are two types of omega-3 fatty acids well known to be beneficial for human health. CaPre®, currently Acasti's only prescription drug candidate, is a highly purified omega-3 phospholipid concentrate derived from krill oil and is being developed to help prevent and treat hypertriglyceridemia, which is a condition characterized by abnormally high levels of triglycerides in the bloodstream. ONEMIA®, a medical food and currently Acasti's only commercialized product, is a purified omega-3 phospholipid concentrate levels of phospholipids, EPA and DHA content than CaPre®.

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 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) accepts responsibility for the adequacy or accuracy of this release.

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