

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 April 2014.

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 [] Form 40-F [x]

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 April 28, 2014 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 April 28, 2014

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)

Date: April 28, 2014

/s/ XAVIER HARLAND

Xavier Harland
CFO

Neptune, Acasti and NeuroBioPharm Announce Resignation of Chief Executive Officer

LAVAL, Quebec, April 28, 2014 (GLOBE NEWSWIRE) -- Neptune Technologies & Bioressources Inc. (" **Neptune**") (Nasdaq:NEPT) (TSX:NTB), Acasti Pharma Inc. ("**Acasti**") (Nasdaq:ACST) (TSX-V:APO) and NeuroBioPharm Inc. ("**NeuroBio**") today jointly announce the resignation of Henri Harland as President and Chief Executive Officer of Neptune, Acasti and NeuroBio with immediate effect. Mr. Harland remains a Director of Neptune, Acasti and NeuroBio.

"I would like to thank Henri for his significant contributions as founder and executive of Neptune and its subsidiaries and wish him success in the future," said Dr. Ronald Denis, Chairman of Neptune.

The businesses will continue to be managed by a management and operations committee under the leadership of Neptune's Chief Financial Officer, Mr. André Godin. The search for a new President and Chief Executive Officer will commence immediately.

About Neptune Technologies & Bioressources Inc.

Neptune is a biotechnology company engaged primarily in the development and commercialization of marine-derived omega-3 polyunsaturated fatty acids ("**PUFAs**"). Neptune has a patented process of extracting oils from Antarctic krill, and principally sells omega-3 PUFAs as bulk oil to Neptune's distributors who commercialize them under their private label primarily in the U.S., European and Australian nutraceutical markets. Neptune's products generally come in bulk oil or capsule form and serve as a dietary supplement to consumers. Neptune's head office is located at 545 Promenade du Centropolis, Suite 100, Laval, Quebec.

Neptune respectively holds approximately 49% of the participating and voting rights of Acasti and 96% of the voting rights of NeuroBio. Through these subsidiaries, Neptune is also pursuing opportunities in the medical food and prescription drug markets. Acasti and NeuroBio respectively focus on the research and development of safe and therapeutically effective compounds for highly prevalent atherosclerotic conditions, such as cardiometabolic disorders and cardiovascular diseases, and for neurodegenerative and inflammation related conditions. Acasti's lead prescription drug candidate is CaPre®, a purified high omega-3 phospholipid concentrate derived from Neptune krill oil being developed to address the prevention and treatment of cardiometabolic disorders, including hypertriglyceridemia, which is characterized by abnormally high levels of triglycerides.

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 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 derived from krill oil with lower levels of phospholipids, EPA and DHA content than CaPre®.

About NeuroBioPharm Inc.

NeuroBio is an emerging biopharmaceutical company focused on the research, development and commercialization of new marine based omega-3 phospholipid therapies for use in the human neurological field, including conditions, abnormalities and/or diseases related to cognitive functions such as attention, memory, concentration and learning and the management of neurological and neurodevelopmental disorders from prevention to treatment. NeuroBio is currently in the early stages of developing novel active pharmaceutical ingredients into commercial products for the medical food, the over-the-counter and the prescription drug markets. Particular focus is being given to attention-deficit hyperactivity disorder, cognitive functions, including memory and concentration, along with mood disorders, such as anxiety and depression.

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 Neptune, Acasti and NeuroBio to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. 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 herein are also subject generally to other risks and uncertainties that are described from time to time in Neptune, Acasti and NeuroBio's public securities filings with the Securities and Exchange Commission and the Canadian securities commissions. Except as required by law, Neptune, Acasti and NeuroBio disclaim any intention or obligation to update or revise any forward-looking statements.

"Neither NASDAQ, the Toronto Stock Exchange nor the TSX Venture Exchange accepts responsibility for the adequacy or accuracy of this release."

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