

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported): September 23, 2004

XOMA LTD.

(Exact name of registrant as specified in its charter)

BERMUDA

(State or other jurisdiction of incorporation)

0-14710

52-2154066

(Commission File Number)

(IRS Employer Identification No.)

2910 Seventh Street, Berkeley, California

94710

(Address of principal executive offices)

(Zip code)

Registrant's telephone number, including area code

(510) 204-7200

(Former name or former address, if changed since last report)

Item 8.01. Other Events

As announced on September 23, 2004, XOMA Ltd. and Aphton Corporation have entered into a collaborative agreement.

A copy of the press release is attached hereto as Exhibit 1 and is incorporated herein by reference.

Item 9.01. Exhibits

1. Press Release dated September 23, 2004.

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SIGNATURE

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 hereunto duly authorized.

Dated: September 23, 2004

XOMA LTD.

By: /s/ Christopher J. Margolin

Christopher J. Margolin
Vice President, General
Counsel and Secretary

EXHIBIT INDEX

Number Description

1. Press Release dated September 23, 2004.

APHTON AND XOMA FORM THERAPEUTIC ANTIBODY COLLABORATION FOR TREATING
GASTROINTESTINAL CANCERS

-- Agreement Leverages Companies' Strengths in Anti-Gastrin Immunotherapy
and Monoclonal Antibody Development --

Miami, FL and Berkeley, CA - September 23, 2004 - Aphton Corporation (Nasdaq: APHT) and XOMA Ltd. (Nasdaq: XOMA) today announced they have signed a worldwide collaboration agreement for the treatment of gastrointestinal and other gastrin-sensitive cancers using anti-gastrin monoclonal antibodies.

Under the terms of the agreement, Aphton and XOMA will share all development expenses and all commercialization profits and losses for all product candidates on a 70/30 basis, respectively. XOMA will have worldwide manufacturing rights for these products and the ability to share up to 30% in the commercialization efforts in the U.S. in accordance with the terms of the agreement. Aphton will share commercialization rights in the U.S. and will have exclusive rights to commercialize all products outside the U.S.

One of the strategies to be utilized in the collaboration will be the application of XOMA's Human Engineering(TM) technology to monoclonal antibodies developed by Aphton.

"We are enthusiastic about initiating this collaboration with XOMA, one of the leaders in the field of monoclonal antibodies," Patrick Mooney, President and CEO of Aphton, said. "The collaboration combines the experience of Aphton in anti-gastrin cancer therapy with XOMA's technologies, experience and broad-based capabilities in developing and manufacturing monoclonal and other antibodies. We anticipate the antibody product will be complementary to Aphton's immunotherapeutic Insegia(TM) (G17DT), and represent an important extension of our portfolio."

"For patients with gastrointestinal cancers, therapeutic antibodies against gastrin have the potential to be an important medical advancement" said John L. Castello, XOMA's Chairman, President and Chief Executive Officer. "We look forward to collaborating with Aphton and realizing the advantages of working with a pioneer in the field of anti-gastrin cancer therapy as we collectively pursue the development and commercialization of products in this area. In addition, this collaboration represents another partnering milestone for XOMA and provides us with a compelling addition to our product pipeline."

About Gastrin

The antibodies to be developed under the collaboration will bind and neutralize the hormones gastrin 17 and gly-gastrin 17 (a gastrin precursor) that are known to be involved in tumor progression in gastrointestinal (GI) cancers.

Gastrin is a key hormone in the embryological development of the GI system. Post embryological development, most of the gastrin and gastrin receptor genes throughout the GI system are shut down. Gastrin genes are reactivated in precancerous cells and polyps and in cancer cells early in

the development of cancer. Gastrin secretion and the expression of gastrin receptors increase as the cancer progresses. Gastrin works by signaling through its receptor, the gastrin receptor (CCK-2/Gastrin-R).

In normal adult tissue, gastrin is only produced in the antrum region of the stomach and its receptor is produced only on its target cells found in the normal stomach (Parietal and ECL cells). Normally, gastrin is secreted by cells in the stomach primarily after eating and is responsible for producing approximately 90% of the body's stomach acid.

In cancer cells, gastrin acts to signal growth and proliferation conferring a growth advantage on them. Gastrin expression and the appearance of gastrin receptors have been associated with increasing malignant characteristics of GI tumors and with poorer prognostic outcomes. Specifically, gastrin is known to be involved in the progression of colorectal, stomach, liver and pancreatic cancers.

It has been shown that inhibiting gastrin inhibits cell growth, proliferation and metastasis leading to programmed cell death (apoptosis). This tilts the balance from cell growth to cell suicide. Gastrin also stimulates the secretion and expression of other important growth factors and receptors within and on the surfaces of the cancer cells involved in tumor growth. Hence, inhibiting gastrin inhibits all of these factors that contribute to tumor growth and spread resulting in tumor cell death.

About XOMA's Antibody Capabilities and Oncology Presence

XOMA possesses a multi-technology platform and fully-integrated product development infrastructure for therapeutic antibody generation, optimization, production and development. Included in this platform are leading commercially available antibody phage display libraries and XOMA's proprietary Human Engineering™ technology for generating high quality, monoclonal antibodies for therapeutic use in humans. In addition, XOMA's substantial experience and broad-based capabilities in monoclonal antibody evaluation, production and development enable the rapid advancement of candidate molecules from preclinical stage to product launch.

In February 2004, XOMA entered into a comprehensive strategic alliance with Chiron Corporation for the development and commercialization of antibody products for the treatment of cancer. XOMA's collaboration with Aphton for therapeutic antibodies against gastrin is a permitted exception under the agreement with Chiron, which is exclusive between Chiron and XOMA in the field of antibody products for the treatment of cancer through February of 2007, extendable at Chiron's election through February of 2009.

About Aphton Corporation

Aphton Corporation is a clinical stage biopharmaceutical company developing targeted immunotherapies for cancer and other diseases. Aphton's products neutralize hormones involved in the growth and proliferation of cancers of the gastrointestinal system and reproductive system, as well as other diseases. Aphton has strategic alliances with Aventis Pasteur for treating gastrointestinal system and other cancers with Insegia in North America and Europe; GlaxoSmithKline for reproductive system cancer and non-cancer diseases worldwide; Daiichi Pure Chemicals for the development, manufacturing and commercialization of gastrin-related diagnostic kits; and others.

About XOMA

XOMA is a biopharmaceutical company focused on the development and commercialization of antibody and other protein-based biopharmaceuticals for disease targets that include cancer,

immunological and inflammatory disorders, and infectious diseases. XOMA's proprietary and collaborative product development programs include: RAPTIVA™ for moderate to severe plaque psoriasis (marketed) and other indications in collaboration with Genentech, Inc.; MLN 2222, a recombinant protein for reducing the incidence of post-operative events in coronary artery bypass graft surgery patients with Millennium Pharmaceuticals, Inc. (Phase I); C1212, an anti-CD40 antibody for treating B-cell tumors and additional product candidates in connection with the antibody oncology collaboration with Chiron Corporation (preclinical); and a TPO mimetic antibody to treat chemotherapy-induced thrombocytopenia in collaboration with Alexion Pharmaceuticals, Inc. (preclinical). XOMA's proprietary bactericidal/permeability-increasing protein (BPI)-derived programs include NEUPREX(R), in a Phase I/II study to limit complications following pediatric cardiopulmonary bypass surgery. For more information about XOMA's product pipeline and antibody product development capabilities and technologies, please visit XOMA's website at <http://www.xoma.com/>.

This press release includes forward looking statements, including Aphton's and XOMA's expectations regarding (i) the development, manufacturing and commercialization of anti-gastrin antibodies, including the technology to be used to Human Engineer™ antibodies, and (ii) the potential uses of such antibodies and the benefits to be derived from such antibodies. These forward-looking statements may be affected by the risks and uncertainties inherent in the drug development process and in Aphton's and XOMA's business. This information is qualified in its entirety by cautionary statements and risk factor disclosure contained in Aphton's and XOMA's Securities and Exchange Commission filings, including Aphton's report on Form 10-K filed with the Commission on March 15, 2004 and XOMA's report on Form 10-K filed with the Commission on March 15, 2004. Aphton and XOMA wish to caution readers that certain important factors may have affected and could in the future affect Aphton's and XOMA's beliefs and expectations and could cause the actual results to differ materially from those expressed in any forward-looking statement made by or on behalf of Aphton and XOMA. These risk factors include, but are not limited to, (1) the ability of Aphton and XOMA to successfully collaborate in the development of anti-gastrin antibodies, (2) the results of pre-clinical testing, (3) the timing or results of future clinical trials (including the design and progress of clinical trials, safety and efficacy of the products being tested, action, inaction or delay by the FDA, European or other regulators or their advisory bodies, and interpretation by these entities and others of scientific data), (4) the ability of Aphton and XOMA to obtain regulatory approval for anti-gastrin antibodies, (5) the ability of XOMA and any approved third parties to manufacture and supply the anti-gastrin antibodies in commercial quantities, (6) the ability of Aphton and XOMA to gain commercial acceptance for the anti-gastrin antibodies, (7) the ability of Aphton and XOMA to fund the development, manufacturing and commercialization of anti-gastrin antibodies, (8) any breach of the collaboration agreement by Aphton and/or XOMA,

(9) intellectual property risks, (10) the impact of competitive products and pricing, and (11) changing economic conditions. Aphton and XOMA undertake no obligation to update forward-looking statements to reflect events or circumstances after the date hereof.

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