

U.S. 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): August 21, 2006

ORTHODONTIX, INC.

(Exact Name of Registrant as Specified in its Charter)

Florida (State or other jurisdiction of incorporation)	000-27836 Commission File Number	65-0643773 (IRS Employer Identification No.)
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1428 Brickell Avenue, Suite 105  
Miami, Florida 33131  
(Address of principal executive offices)

(305) 371-4112  
(Registrant's Telephone Number)

Not Applicable  
(Former name, former address and former fiscal year,  
if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 1.01 ENTRY INTO A MATERIAL DEFINITIVE AGREEMENT

On August 21, 2006, Orthodontix, Inc. ("Orthodontix" or the "Company") entered into a definitive merger agreement (the "Agreement") with Protalix Ltd., an Israeli biotechnology company ("Protalix"). Shareholders of the Company will own approximately 0.84% of the merged companies, and Orthodontix will change its name to Protalix Biotherapeutics, Inc. after the merger.

Orthodontix formed an Israeli subsidiary Protalix Acquisition Ltd. to facilitate the merger, which is expected to occur in the fourth quarter of 2006. The merger is subject to customary covenants and several conditions, including approval of the merger by the appropriate Israeli authorities.

The Company intends to apply for listing on the American Stock Exchange immediately following the merger.

Pursuant to a share purchase agreement also dated August 21, 2006, the majority shareholders of the Company, Dr. Phillip Frost and Glenn L. Halpryn, are part of a small group of investors who are investing \$15 million into Protalix in exchange for 14% of the stock of Protalix and warrants to purchase an additional 5% of the stock of Protalix for an additional \$5 million.

ITEM 9.01 FINANCIAL STATEMENTS AND EXHIBITS

Exhibit 99.1 Press Release dated August 22, 2006.

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 thereunto duly authorized.

ORTHODONTIX, INC.  
(Registrant)

Dated: August 23, 2006

By: /s/ Glenn L. Halpryn

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Glenn L. Halpryn  
Chief Executive Officer

ORTHODONTIX AND PROTALIX ANNOUNCE MERGER AGREEMENT

Miami, Florida and Carmiel, Israel -- August 22, 2006 -- Orthodontix, Inc. (OTIX:OTC.BB), a publicly-held company located in Miami, Florida, and Protalix Ltd., an Israeli biotechnology company, announced today that they entered into a definitive merger agreement on August 21, 2006. Under the terms of the agreement, each ordinary share of Protalix will be converted into approximately 594.5 shares of common stock of Orthodontix. The merger is subject to customary covenants and several conditions, and is expected to close in the fourth quarter of 2006. As a result of the merger, it is expected that Orthodontix shareholders will receive approximately 0.84% of Protalix on a fully diluted basis. Simultaneously with the execution of the merger agreement, a small group of investors, including Dr. Phillip Frost and Glenn Halpryn who own in the aggregate a majority of the outstanding common stock of Orthodontix, agreed to invest \$15 million in Protalix pursuant to a stock purchase agreement, in exchange for ordinary shares representing approximately 14% of Protalix on a fully-diluted basis. The investors will also receive warrants to purchase an additional 5% of the ordinary shares of Protalix. The stock purchase is expected to close within a month and is not subject to completion of the merger.

"We are excited by the breadth of Protalix's unique plant cell culture bioreactor platform, the quality of the management team and the prospects for the company's products and technology, particularly its lead product for the treatment of Gaucher Disease, which is progressing through the clinical development process," stated Dr. Phillip Frost. "Based upon its unique capabilities to manufacture safe and efficacious recombinant proteins for a number of therapeutic areas, we expect that Protalix will establish itself over the coming years as an innovative leader in this area."

Dr. David Aviezer, Protalix's CEO said: "We are privileged to have Dr. Frost join us as a shareholder and board member. We believe that this investment, made by a top-tier industry leader, provides important recognition to Protalix's technology and vision. We are confident that Protalix's Board of Directors will highly benefit from the knowledge and experience brought by Drs. Frost and Hsiao".

Mr. Eli Hurvitz, Chairman of Protalix's Board of Directors said: "We are very pleased with Dr. Frost joining Protalix's Board of Directors. This investment is an important milestone in Protalix's pathway to becoming a true international biotech player. We view this as an important sign of confidence in Israeli biotechnology in general and in Protalix in particular. We are looking forward to joining forces with Dr. Frost. "

Protalix has developed and patented a unique plant cell culture platform and bioreactor system that provides an efficient, easily scaleable and cost-effective system for the expression of human therapeutic proteins. The company's lead program is the development of Glucocerebrosidase, as a proprietary enzyme replacement therapy for the treatment of Gaucher Disease, a genetic metabolic disorder. The drug is slated to begin Phase III clinical trials this fall.

In addition to enzymes, Protalix has produced several other classes of biological molecules, including antibodies, hormones, peptide-based veterinary vaccines, and beta interferon, demonstrating that the technology can be extended to these types of therapeutics. Protalix intends to leverage the unique benefits of its biotechnology platform to generate revenue by providing large-scale protein and antibody production capacity to pharmaceutical and biotechnology companies, thus providing a cost-effective solution for an anticipated worldwide production capacity shortfall. Protalix has also entered into strategic and licensing-based collaborations with several biotechnology and pharmaceutical companies.

The investment will bring additional expertise to an already prominent Protalix Board of Directors. Eli Hurvitz, the Chairman of Protalix is also Chairman of the Board of Teva Pharmaceutical Industries Ltd., an Israeli generic pharmaceutical company that had \$6.5 billion in revenue in 2005. Following the investment, Dr. Phillip Frost, Vice-Chairman of Teva, will become a member of the Board of Directors of Protalix. Dr. Jane Hsiao, who was formerly Vice-Chairman of IVAX Corporation and who is one of the new investors in Protalix, will also become a director of Protalix. Dr. David Aviezer, the CEO of Protalix, will serve as the CEO of the merged company.

Orthodontix, which has been seeking a business combination, will change its name to Protalix Biotherapeutics, Inc. after the merger and intends to apply for listing on a major stock exchange.

#### Forward-Looking Statements.

Certain of the statements set forth in this press release constitute "Forward looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, without limitation, any statement that may predict, forecast, indicate, or imply future results, performance or achievements, and may contain the words "estimate," "project," "intend," "forecast," "anticipate," "plan," "planning," "expect," "believe," "will," "will likely," "should," "could," "would," "may" or words or expressions of similar meaning. All such forward-looking statements involve risks and uncertainties including, but not limited to the successful integration of the business of Protalix and the successful implementation of Protalix's business strategy which will be impacted by risks regarding Protalix's research and development programs; dependence on patent and other protections for Protalix's innovative technology; proposed marketing and sales and associated market acceptance; the effect of competition and proprietary rights of third parties; the ability to obtain or maintain patent or other proprietary intellectual property protection; the need for and availability of additional financing and access to capital; the seeking of joint development, licensing or distribution and collaboration and marketing arrangements with pharmaceutical companies; regulatory actions or delays, and the risk that conditions to the completion of the merger may not be satisfied and the merger may not be completed. Certain of these risks and uncertainties will be described in greater detail in Orthodontix' filings with the Securities and Exchange Commission. Accordingly, there can be no assurance that such forward-looking statements will prove to be accurate and Orthodontix and Protalix undertake no obligation (and expressly disclaim any such obligation) to update any forward-looking statements or to announce revisions to any of the forward-looking statements, whether as a result of new information, future events or otherwise.

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