

AXONYX INC  
Form S-4/A  
August 25, 2006

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As filed with the Securities and Exchange Commission on August 25, 2006

Registration No. 333-136018

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Amendment No. 2 to  
FORM S-4**

REGISTRATION STATEMENT

Under

The Securities Act of 1933

**AXONYX INC.**

(Exact name of Registrant as specified in its charter)

**Nevada**  
(State or other jurisdiction of  
incorporation or organization)

**2834**  
(Primary Standard Industrial  
Classification Code Number)  
**500 Seventh Avenue, 10th Floor**  
**New York, New York 10018**  
**(212) 645-7704**

**86-0883978**  
(I.R.S. Employer  
Identification Number)

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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**Gosse B. Bruinsma, M.D.**  
**Chief Executive Officer**  
**Axonyx Inc.**  
**500 Seventh Avenue, 10th Floor**  
**New York, New York 10018**  
**Tel: (212) 645-7704**  
**Fax: (212) 989-1745**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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**Approximate date of commencement of proposed sale to the public:**  
**As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under**

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**the merger agreement described herein.**

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

**The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

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**EXPLANATORY NOTE**

This Amendment No. 2 to the Registrant's Registration Statement on Form S-4 (File No. 333-136018) is being filed solely for the purpose of filing signed versions of Exhibits 8.1 and 8.2, and no changes or additions are being made hereby to the joint proxy statement/prospectus that forms a part of the Registration Statement. Accordingly, the joint proxy statement/prospectus has been omitted from this filing.

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**SIGNATURES**

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the city of New York, state of New York, on August 25, 2006.

AXONYX INC.

By:           /s/ S. COLIN NEILL

S. Colin Neill

*Chief Financial Officer, Treasurer and Secretary*

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 2 registration statement has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>          /s/ GOSSE B. BRUINSMA, M.D.*</u> Gosse B. Bruinsma, M.D.	President and Chief Executive Officer, (Principal Executive Officer), Director	August 25, 2006
<u>          /s/ STEVEN B. RATOFF*</u> Steven B. Ratoff	Director and Chairman	August 25, 2006
<u>          /s/ S. COLIN NEILL</u> S. Colin Neill	Chief Financial Officer, Treasurer and Secretary (Principal Financial and Accounting Officer)	August 25, 2006
<u>          /s/ LOUIS G. CORNACCHIA*</u> Louis G. Cornacchia	Director	August 25, 2006
<u>          /s/ STEVEN H. FERRIS, PH.D.*</u> Steven H. Ferris, Ph.D.	Director	August 25, 2006
<u>          /s/ MARVIN S. HAUSMAN, M.D.*</u> Marvin S. Hausman, M.D.	Director	August 25, 2006
<u>          /s/ RALPH SNYDERMAN, M.D.*</u> Ralph Snyderman, M.D.	Director	August 25, 2006

\*By:           /s/ S. COLIN NEILL

S. Colin Neill  
*Attorney-in-fact*

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EXPLANATORY NOTE

SIGNATURES