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): January 9, 2004

GENOME THERAPEUTICS CORP.

(Exact name of registrant as specified in its charter)

Massachusetts (State or other

0-10824 (Commission File Number) 04-2297484 (I.R.S. Employer

jurisdiction of incorporation)

Identification Number)

100 Beaver Street

Waltham, Massachusetts 02453

(Address of principal executive offices, including zip code)

(781) 398-2300

(Registrant s telephone number, including area code)

ITEM 5. OTHER EVENTS

On January 9, 2004, Genome Therapeutics Corp. issued a press release announcing the sale of Genome Therapeutics pending patent applications relating to the organism *Streptococcus pneumoniae* to Aventis Pasteur, which is attached hereto as Exhibit 99.1.

- Item 7. FINANCIAL STATEMENTS AND EXHIBITS.
- (c) Exhibits
- 99.1 Press Release issued by Genome Therapeutics Corp. on January 9, 2004.

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 hereunto duly authorized.

GENOME THERAPEUTICS CORP.

By: /s/ Steven M. Rauscher

Name: Steven M. Rauscher Title: President and Chief Executive Officer

Date: January 9, 2004

3

EXHIBIT INDEX

Exhibit Number	Description
	
99.1	Press Release issued by Genome Therapeutics Corp. on January 9, 2004.

4