# SECURITIES AND EXCHANGE COMMISSION 

Washington, D.C. 20549

## FORM 8-K

## CURRENT REPORT

Pursuant to

Section 13 or 15(d) of

# GENOME THERAPEUTICS CORP. 

(Exact name of registrant as specified in its charter)

| Massachusetts <br> (State or other jurisdiction of incorporation) | 0-10824 <br> (Commission File Number) | 04-2297484 <br> (I.R.S. Employer Identification Number) |
| :---: | :---: | :---: |
| 100 Beaver Street |  |  |
| Waltham, Massachusetts 02453 |  |  |
| (Address of principal executive offices, including zip code) |  |  |

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ITEM 5. OTHER EVENTS

On December 30, 2003, Genome Therapeutics Corp. and GeneSoft Pharmaceuticals, Inc. issued a joint press release announcing that Genome s registration statement on Form S-4 related to the proposed merger with Genesoft had been declared effective by the Securities and Exchange commission, 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. and GeneSoft Pharmaceuticals, Inc. on December 30, 2003.

## 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.

## Date: December 30, 2003

By:
/s/ Steven M. Rauscher

Steven M. Rauscher
Title:
President and Chief Executive Officer

## EXHIBIT INDEX

## Exhibit No.

99.1

## Description

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