



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

October 29, 2010

Via U.S. Mail

Ms. Karen Linehan
General Counsel
Sanofi-Aventis
174, avenue de France
75013 Paris, France

**Re: Genzyme Corporation
Amendment No. 3 to Schedule TO-T
Filed on October 20, 2010
Amendment No. 4 to Schedule TO-T
Filed on October 28, 2010
Amendment No. 5 to Schedule TO-T
Filed on October 29, 2010
Filed by GC Merger Corp. and Sanofi-Aventis
File No. 005-37205**

Dear Ms. Linehan:

We have reviewed your amended filing and have the following comments.

Amendment No. 3 to Schedule TO-T

Purpose of the Offer...., page 23

1. We note your response to prior comment 6. In your response, you do not address the point that these transactions following the offer may be made using methods other than open market purchases. Please advise how you concluded that reserving the right to make these additional purchases through unspecified methods is consistent with Rule 13e-3(g)(1)(i)(A), which requires disclosure of the form of the proposed transaction.

Certain Conditions of the Offer, page 29

2. We note your response to prior comment 8. Please disclose how you will determine whether an action or proceeding is threatened, or a change or development of the kind noted is threatened.

Ms. Karen Linehan
Sanofi-Aventis
October 29, 2010
Page 2

Letter of Transmittal

Irregularities, page 9

3. You have retained a reference to the final and binding nature of your determinations in this section. Please revise.

Amendment No. 4 to Schedule TO-T

Exhibit 99(A)(5)(F)

4. This exhibit indicates that the tender offer of \$69 per share is “compelling” and that this share price consideration “Represents a substantial premium.” Given that the closing share price for Genzyme has been above the offer price since the tender offer was commenced, please advise us of the basis upon which these specific disclosures were made. In addition, please advise us of what procedures the bidders have instituted to ensure that similar disclosures do not appear in future filings to the extent inconsistent with published trading prices. This comment also applies to Exhibit 99(A)(5)(G) to Amendment No. 5 to Schedule TO-T

You may contact me at (202) 551-3503 if you have any questions regarding our comments, or, if you require further assistance, you may call Nicholas P. Panos, Senior Special Counsel, at (202) 551-3266.

Sincerely,

David L. Orlic
Special Counsel
Office of Mergers & Acquisitions

cc: Via facsimile: (212) 310-8007
Michael J. Aiello, Esq.
Weil, Gotshal & Manges LLP