

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
September 13, 2010**

**ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

**Genzyme Corporation
File No. 000-14680 - CF# 25523**

Genzyme Corporation submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-Q filed on August 9, 2010.

Based on representations Genzyme Corporation that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibits will not be released to the public for the time periods specified:

Exhibit 2.1	through August 6, 2020
Exhibit 10.3.1	through August 6, 2015
Exhibit 10.9	through June 30, 2015
Exhibit 10.10	through December 31, 2013

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Daniel Greenspan
Special Counsel