Slowing of Brain Atrophy and Reductions in New Multiple Sclerosis Lesions Sustained at Three Years in Patients Treated with Genzyme's Lemtrada™

- Consistent effects seen across key MRI measures of disease activity; Effects were sustained beyond two-year pivotal MS studies -

- Approximately 80 percent of patients treated with Lemtrada did not receive a third course of treatment in the first year of the extension -

Paris, France - April 30, 2014 - Sanofi (EURONEXT: SAN and NYSE: SNY) and its subsidiary Genzyme announced today new magnetic resonance imaging (MRI) data from the Lemtrada (alemtuzumab) clinical development program. In Lemtrada patients from the two Phase III clinical trials (both treatment-naïve patients and patients who had active disease on another therapy), MRI effects observed after two years were maintained during the first year of the extension study. These data, which are being presented today at the 66th American Academy of Neurology (AAN) Annual Meeting, include:

- Consistent effects were seen across key measures of disease activity (gadolinium (gd)-enhancing, T2 hyperintense and T1 hypointense lesion activity) and effects seen after two years of treatment were sustained at year three.
- During the third year of follow-up, more than 70% of patients were free of MRI activity indicative of acute inflammation, defined as gd-enhancing or new or enlarging T2 hyperintense lesions.
- T2 lesion volumes, which reflect the combined burden of permanent brain injury and new lesion formation, increased from year two to three but remained below pre-treatment baseline.
- The rate of atrophy, as measured by brain parenchymal fraction, already reduced after two years, continued to slow in the third year of follow-up.
- Approximately 80 percent of patients treated with Lemtrada did not receive a third course of treatment in the first year of the extension.

"What's remarkable about these data is that the positive MRI effects of Lemtrada were sustained into the extension study, even though most patients did not receive additional Lemtrada treatment. This observation is unique amongst the current landscape of MS therapeutics," said Douglas Arnold, M.D., NeuroRx Research and Department of Neurology and Neurosurgery, Montreal Neurological Institute, McGill University. *"The new MRI results are an important addition to the clinical data from the extension study that demonstrated Lemtrada's effect on key measures of clinical disease activity including annualized relapse rates and sustained accumulation of disability."*

The most common side effects of Lemtrada are infusion associated reactions (headache, rash, pyrexia, nausea, fatigue, urticaria, insomnia, pruritus, diarrhea, chills, dizziness, and flushing), infections (upper respiratory tract and urinary tract), and lymphopenia. Autoimmune conditions (including immune thrombocytopenia, other cytopenias, glomerulonephritis and thyroid disease) and serious infections can occur in patients receiving Lemtrada. A comprehensive risk management program incorporating education and monitoring will support early detection and management of these identified risks. Safety results from the first year of the extension study were previously reported for patients who received Lemtrada in the Phase III CARE-MS studies. No new risks were identified. As previously reported,

there were two deaths in the extension study. One was from sepsis and the other was presumed accidental and deemed unrelated to study treatment.

The Phase III trials of Lemtrada were randomized, two-year studies comparing treatment with Lemtrada to high-dose subcutaneous interferon beta-1a (Rebif®) in patients with RRMS who had active disease and were either new to treatment (CARE-MS I) or who had relapsed while on prior therapy (CARE-MS II). In these studies, patients on Lemtrada received two courses of treatment, the first administered via intravenous infusion on five consecutive days, and the second administered on three consecutive days, 12 months later.

Lemtrada-treated patients who continued uninterrupted follow-up in the extension study were eligible for re-treatment on evidence of disease activity. This analysis included 349 Lemtrada-treated patients from CARE-MS I and 393 Lemtrada-treated patients from CARE-MS II; 18 percent and 20 percent, respectively, received re-treatment. MRI scans were taken at CARE-MS baseline, and at 12, 24, and 36 months.

"*Given the importance of MRI in measuring disease activity in MS*, *the Lemtrada data announced today are significant,*" said Genzyme President and CEO, David Meeker, M.D. "*These results reinforce the potential that Lemtrada holds to transform the treatment of MS*."

In CARE-MS I, Lemtrada was significantly more effective than interferon beta-1a at reducing annualized relapse rates; the difference observed in slowing disability progression did not reach statistical significance. In CARE-MS II, Lemtrada was significantly more effective than interferon beta-1a at reducing annualized relapse rates, and accumulation of disability was significantly slowed in patients given Lemtrada vs. interferon beta-1a.

About Lemtrada™ (alemtuzumab)

Lemtrada is approved in the European Union, Australia, Brazil, Canada and Mexico. Lemtrada is currently not approved in the United States. Following constructive discussions with the FDA, Genzyme plans to resubmit in the second quarter of 2014 its application seeking U.S. approval of Lemtrada. The resubmission will provide information to specifically address issues previously noted by the FDA in its December 2013 Complete Response Letter. Marketing applications for Lemtrada are also under review in other countries. Lemtrada is supported by a comprehensive and extensive clinical development program that involved nearly 1,500 patients and 5,400 patient-years of follow-up.

Alemtuzumab is a monoclonal antibody that selectively targets CD52, a protein abundant on T and B cells. Treatment with alemtuzumab results in the depletion of circulating T and B cells thought to be responsible for the damaging inflammatory process in MS. Alemtuzumab has minimal impact on other immune cells. The acute anti-inflammatory effect of alemtuzumab is immediately followed by the onset of a distinctive pattern of T and B cell repopulation that continues over time, rebalancing the immune system in a way that potentially reduces MS disease activity.

Genzyme holds the worldwide rights to alemtuzumab and has primary responsibility for its development and commercialization in multiple sclerosis. Bayer HealthCare holds the right to co-promote alemtuzumab in MS in the United States. Upon commercialization, Bayer will receive contingent payments based on global sales revenue.

About Genzyme, a Sanofi Company

Genzyme has pioneered the development and delivery of transformative therapies for patients affected by rare and debilitating diseases for over 30 years. We accomplish our goals through world-class research and with the compassion and commitment of our employees. With a focus on rare diseases and multiple sclerosis, we are dedicated to making a positive impact on the lives of the patients and families we serve. That goal guides and inspires us every day. Genzyme's portfolio of transformative therapies, which are marketed in countries around the world, represents groundbreaking and life-saving

advances in medicine. As a Sanofi company, Genzyme benefits from the reach and resources of one of the world's largest pharmaceutical companies, with a shared commitment to improving the lives of patients. Learn more at www.genzyme.com.

Genzyme® is a registered trademark and Lemtrada™ is a trademark of Genzyme Corporation. Rebif® is a registered trademark of EMD Serono, Inc.

About Sanofi

Sanofi, a global healthcare leader, discovers, develops and distributes therapeutic solutions focused on patients' needs. Sanofi has core strengths in the field of healthcare with seven growth platforms: diabetes solutions, human vaccines, innovative drugs, consumer healthcare, emerging markets, animal health and the new Genzyme. Sanofi is listed in Paris (EURONEXT: SAN) and in New York (NYSE: SNY).

Sanofi Forward Looking Statements

This press release contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements are statements that are not historical facts. These statements include projections and estimates and their underlying assumptions, statements regarding plans, objectives, intentions and expectations with respect to future financial results, events, operations, services, product development and potential, and statements regarding future performance. Forward-looking statements are generally identified by the words "expects", "anticipates", "believes", "intends", "estimates", "plans" and similar expressions. Although Sanofi's management believes that the expectations reflected in such forward-looking statements are reasonable, investors are cautioned that forward-looking information and statements are subject to various risks and uncertainties, many of which are difficult to predict and generally beyond the control of Sanofi, that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include among other things, the uncertainties inherent in research and development, future clinical data and analysis, including post marketing, decisions by regulatory authorities, such as the FDA or the EMA, regarding whether and when to approve any drug, device or biological application that may be filed for any such product candidates as well as their decisions regarding labelling and other matters that could affect the availability or commercial potential of such product candidates, the absence of guarantee that the product candidates if approved will be commercially successful, the future approval and commercial success of therapeutic alternatives, the Group's ability to benefit from external growth opportunities, trends in exchange rates and prevailing interest rates, the impact of cost containment policies and subsequent changes thereto, the average number of shares outstanding as well as those discussed or identified in the public filings with the SEC and the AMF made by Sanofi, including those listed under "Risk Factors" and "Cautionary Statement Regarding Forward-Looking Statements" in Sanofi's annual report on Form 20-F for the year ended December 31, 2013. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.

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