Press Release

Sanofi's venglustat earns Breakthrough Therapy designation in the US for type 3 Gaucher disease

Paris, March 18, 2026. The US Food and Drug Administration (FDA) has granted Breakthrough Therapy designation to venglustat, a novel, investigational oral glucosylceramide synthase inhibitor (GCSi), for the treatment of neurological manifestations of type 3 Gaucher disease (GD3), a rare lysosomal storage disorder.

The designation is based on data from the LEAP2MONO phase 3 study (clinical study identifier: NCT05222906) in which patients receiving venglustat demonstrated statistically significant improvements in neurological symptoms measured by a global test score that included assessments for ataxia (mSARA) and cognition (RBANS) compared with patients receiving the enzyme replacement therapy (ERT), imiglucerase (p=0.007). In the study, venglustat was well tolerated overall with no new safety signals compared with previous studies. The most commonly reported adverse events were headache (14.3% in the venglustat arm versus 18.2% in the ERT arm), nausea (14.3% versus 4.5%), spleen enlargement (14.3% versus 0), and diarrhea (14.3% versus 0).

Gaucher disease (GD) is a rare inherited lysosomal storage disorder that results from a deficiency of an enzyme called glucocerebrosidase, leading to the accumulation of sugar-and-fat molecules called glycosphingolipids (GSL) in the spleen, liver, bone marrow, and lungs. There are three major forms of the disease: GD1, characterized by lack of central nervous system (CNS) involvement; GD2, marked by rapid neurological decline and severe neurocognitive symptoms; and GD3, marked by slower and more variable progression and symptom severity.

In people with GD3, accumulation of GSLs in the CNS can result in neurological symptoms, in addition to the systemic manifestations seen in GD1, such as liver and spleen enlargement, anaemia, low platelet counts, and bone disease. Systemic manifestations of GD3 are treated with ERT but there are no approved treatments for the neurological symptoms. Venglustat works by reducing the abnormal accumulation of GSLs. It is designed to cross the blood-brain barrier to target the underlying pathology causing the neurological effects of GD3.

> *"This regulatory milestone recognizes the significant unmet medical need for people living with type 3 Gaucher disease, particularly those experiencing progressive neurological deterioration," said* ***Karin Knobe****, Global Head of Clinical Development, Rare Diseases at Sanofi. "The positive LEAP2MONO findings are an encouraging step forward in the research and development process, and we will continue collaborating with the FDA to advance this potential treatment option."*

Venglustat was previously granted fast-track designation from the FDA for its potential use in GD3 as well as orphan designation for GD3 in the US, EU and Japan. Sanofi will pursue global regulatory filings for venglustat in GD3 during 2026.

FDA Breakthrough Therapy designation is designed to expedite the development and review of medicines in the US that target serious or life-threatening conditions. Medicines qualifying

for this designation must show preliminary clinical evidence that the drug may demonstrate substantial improvement on clinically significant endpoints over available medicines.

About the LEAP2MONO study

The LEAP2MONO phase 3 study was a double-blind, double-dummy, active-comparator, two-arm study that evaluated the efficacy and safety of once daily oral venglustat versus intravenous ERT every two weeks in adults and pediatric patients aged 12 and older with GD3. Forty-three patients were randomized [1:1] to receive venglustat and placebo infusion or ERT and placebo tablet. Patients must have been treated with ERT for at least three years and achieved therapeutic goals for systemic disease manifestations. The primary endpoints for the study were change in SARA modified total score and change in RBANS total scale index score for patients receiving venglustat versus those receiving ERT from baseline to week 52. Systemic key secondary endpoints include percent change in spleen volume, liver volume and platelet count and change in hemoglobin levels. Biomarker key secondary endpoints include percent change in cerebrospinal fluid and plasma GL1 and lyso-GL1. The LEAP2MONO study is ongoing and results from its open-label phase will be presented in the future when available.

About venglustat

Venglustat is a novel, investigational oral glucosylceramide synthase inhibitor (GCSi), designed to cross the blood-brain barrier (i.e., brain-penetrant), that has the potential to slow the progression of GD3 by inhibiting the abnormal GSL accumulation and its physio-pathologic consequences. GSLs are cellular building blocks whose abnormal accumulation is implicated in several rare diseases leading to both cell dysfunction and disease progression.

About Sanofi

Sanofi is an R&D driven, AI-powered biopharma company committed to improving people's lives and delivering compelling growth. We apply our deep understanding of the immune system to invent medicines and vaccines that treat and protect millions of people around the world, with an innovative pipeline that could benefit millions more. Our team is guided by one purpose: we chase the miracles of science to improve people's lives; this inspires us to drive progress and deliver positive impact for our people and the communities we serve, by addressing the most urgent healthcare, environmental, and societal challenges of our time. Sanofi is listed on EURONEXT: SAN and NASDAQ: SNY

Media Relations

Sandrine Guendoul | +33 6 25 09 14 25 | sandrine.guendoul@sanofi.com
Evan Berland | +1 215 432 0234 | evan.berland@sanofi.com
Léo Le Bourhis | +33 6 75 06 43 81 | leo.lebourhis@sanofi.com
Victor Rouault | +1 617 356 4751 | victor.rouault@sanofi.com
Timothy Gilbert | +1 516 521 2929 | timothy.gilbert@sanofi.com
Léa Ubaldi | +33 6 30 19 66 46 | lea.ubaldi@sanofi.com
Ekaterina Pesheva | +1 410 926 6780 | ekaterina.pescheva@sanofi.com

Investor Relations

Thomas Kudsk Larsen |+ 44 7545 513 693 | thomas.larsen@sanofi.com
Alizé Kaisserian | + 33 6 47 04 12 11 | alize.kaisserian@sanofi.com
Keita Browne | + 1 781 249 1766 | keita.browne@sanofi.com
Nathalie Pham | + 33 7 85 93 30 17 | nathalie.pham@sanofi.com
Nina Goworek | +1 908 569 7086 | nina.goworek@sanofi.com
Thibaud Châtelet | + 33 6 80 80 89 90 | thibaud.chatelet@sanofi.com
Yun Li | +33 6 84 00 90 72 | yun.li3@sanofi.com

Sanofi Forward Looking Statement

This press release contains forward-looking statements within the meaning of applicable securities laws, including 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 events and economic performance. Words such as "expect," "anticipate," "believe," "intend," "estimate," "plan," "can," "contemplate," "could," "is designed to," "may," "might," "potential," "objective," "attempt," "target," "project," "strategy," "strive," "desire," "predict," "forecast," "ambition," "guideline," "seek," "should," "will," "goal," or the negative of these, and similar expressions are intended to identify forward-looking statements. 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 U.S Food and Drug Administration or the European Medicines Agency, 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 fact that product candidates if approved may not be commercially successful; unexpected regulatory actions or delays, or government regulation generally; authorities' decisions regarding whether and when to approve a product candidate; political pressure in the United States to mandate lower drug prices including "most favored nation" pricing for State Medicaid programs; the future approval and commercial success of therapeutic alternatives; Sanofi's ability to benefit from external growth opportunities, to complete related transactions and/or obtain regulatory clearances, including future clinical data and analysis of existing clinical data relating to the product, including post marketing, unexpected safety, quality or manufacturing issues, competition in general; risks associated with intellectual property and any related pending or future litigation and the ultimate outcome of such litigation; trends in exchange rates and prevailing interest rates, volatile economic and market conditions, cost containment initiatives and subsequent changes thereto, and the impact that global crises may have on us, our customers, suppliers, vendors, and other business partners, and the financial condition of any one of them, as well as on our employees and on the global economy as a whole. The risks and uncertainties also include the uncertainties discussed or identified in the public filings with the SEC and the French Markest Authority (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, 2025 or contained in our periodic reports on Form 6-K. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements. In light of these risks, uncertainties and assumptions, you should not place undue reliance on any forward-looking statements contained herein.