Press Release

Positive Phase 2 data of novel investigational anti-CD40L antibody frexalimab show significantly reduced disease activity in relapsing multiple sclerosis

- Frexalimab met primary endpoint with 89% reduction in new gadolinium-enhancing T1 brain lesions achieved at Week 12 in the higher-dose treatment arm, compared with placebo
- Sanofi plans to initiate pivotal trials in multiple sclerosis in early 2024

Paris, May 31 2023. New data, being presented in a late-breaking session at the 2023 Consortium of Multiple Sclerosis Centers (CMSC) annual meeting, demonstrate that frexalimab, Sanofi's novel second-generation investigational anti-CD40L antibody, with a unique mechanism of action, significantly reduced disease activity in a Phase 2 trial of patients with relapsing multiple sclerosis (MS). Following 12 weeks of therapy, the number of new gadolinium-enhancing (GdE) T1-lesions was reduced by 89% and 79% in the higher- and lower-dose treatment arms, respectively, compared with placebo, meeting the study's primary endpoint.

A substantial unmet need remains in MS for highly effective and well-tolerated treatment options that provide sustainable control of disease activity and disability progression, while minimizing risks. As the first second-generation anti-CD40L antibody to show efficacy in MS, frexalimab is thought to block the costimulatory CD40/CD40L cellular pathway necessary for adaptive (T and B cells) and innate (macrophages and dendritic cells) immune cell activation and function, without lymphocyte-depletion.

> ***Erik Wallström, MD, PhD***
> Global Head of Neurology Development, Sanofi
> *"Building on our 20 years of research and development in multiple sclerosis, we are committed to growing our robust pipeline of MS therapies by exploring multiple treatment approaches with unique MOAs that have the potential to slow or halt disability, which remains one of the greatest unmet medical needs in multiple sclerosis today."*

> ***Gavin Giovannoni, MD, PhD, FCP, FRCP, FRCPath***
> Chair of Neurology, Blizard Institute, Barts and The London School of Medicine and Dentistry, Queen Mary University of London
> *"Frexalimab has a unique mechanism of action, blocking the CD40/CD40L costimulatory pathway thought to regulate both adaptive and innate immune cell activation and function – a pathway that is pivotal in the pathogenesis of MS. We are thrilled with the results achieved with frexalimab in just 3 months, which shows that CD40L inhibition rapidly controls MS disease activity without lymphocyte depletion."*

Pivotal trials in MS are planned to be launched in 2024.

About the Phase 2 study

The Phase 2 study was a randomized, double-blind, placebo-controlled trial evaluating frexalimab in patients with relapsing MS. In the trial, 129 patients with relapsing MS were randomized (4:4:1:1) to receive either higher or lower doses of frexalimab (n=52 and n=51, respectively) or matching placebo (n=12 and n=14, respectively; pooled for efficacy analyses) for 12 weeks (Part A). After Week 12, patients receiving placebo switched to respective frexalimab arms and entered the open-label Part B, which is currently ongoing. The primary endpoint was the reduction in the number of new GdE T1-hyperintense MRI brain lesions after 12 weeks of treatment. Secondary endpoints included additional MRI-based efficacy measures as well as the safety, tolerability and pharmacokinetics of frexalimab.

In the study, both groups receiving higher or lower doses of frexalimab had significant reductions in new GdE T1-hyperintense lesions after 12 weeks of treatment. At Week 12, high- and low-dose frexalimab significantly reduced the number of new GdE T1-lesions by 89% (95%CI: 62%-97%, p=0.0004) and 79% (95%CI: 44%-92%, p=0.0021), respectively, versus placebo (pooled dose groups). Additionally, both groups treated with frexalimab showed reductions in new or enlarging T2-lesions and total GdE T1-lesions. At Week 24, 96% of participants in the higher-dose frexalimab arm were free of new GdE T1-lesions. Early effects (Week 12) on MSIS-29 physical impact score (a patient-reported outcome) and plasma neurofilament light chain (NfL) levels will also be reported.

Frexalimab was well-tolerated, and 125 (97%) patients completed Part A and continued to the open-label Part B. The most common adverse events (≥4%) in any frexalimab-treated group were COVID-19 (n=5 [9.8%] in the lower-dose group; all uncomplicated cases of mild or moderate intensity) and headache (n=1 [2.0%] and n=3 [5.8%] in the lower- and higher-dose group, respectively).

About frexalimab

Frexalimab (SAR441344) is a novel monoclonal antibody that is thought to block the costimulatory CD40/CD40L cellular pathway necessary for adaptive (T and B cells) and innate (macrophages and dendritic cells) immune cell activation and function, without lymphocyte-depletion. Sanofi is developing SAR441344 under an exclusive license from ImmuNext Inc. Frexalimab is an investigational product, and its safety and efficacy has not been reviewed by any regulatory authority.

About Sanofi

We are an innovative global healthcare company, driven by one purpose: we chase the miracles of science to improve people's lives. Our team, across some 100 countries, is dedicated to transforming the practice of medicine by working to turn the impossible into the possible. We provide potentially life-changing treatment options and life-saving vaccine protection to millions of people globally, while putting sustainability and social responsibility at the center of our ambitions.

Sanofi is listed on EURONEXT: SAN and NASDAQ: SNY

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Sanofi Forward Looking Statement

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 fact that product candidates if approved may not be commercially successful, 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, 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 pandemics or other 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 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, 2022. Other than as required by applicable law, Sanofi does not undertake any obligation to update or revise any forward-looking information or statements.