Dupixent® (dupilumab) late-breaking Phase 3 COPD results presented at ATS and simultaneously published in the New England Journal of Medicine

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Dupixent® (dupilumab) late-breaking Phase 3 COPD results presented at ATS and simultaneously published in the New England Journal of Medicine

- Dupixent is the first and only investigational biologic for COPD that has demonstrated a significant reduction in moderate or severe acute exacerbations by 30% compared to placebo

- Dupixent is the first and only investigational biologic for COPD that has significantly improved lung function at 12 and 52 weeks, with numerical improvements seen as early as 2 weeks

- Dupixent significantly improved quality of life, with numerical improvements as early as 4 weeks after initiating treatment, and respiratory symptoms

- COPD is the third leading cause of death worldwide, with no new treatment approaches approved in more than a decade; trial enrolled patients with moderate-to-severe disease and evidence of type 2 inflammation (i.e., blood eosinophils ≥300 cells/µL)

Paris and Tarrytown, N.Y. May 21, 2023. Positive Phase 3 results evaluating the investigational use of Dupixent® (dupilumab) compared to placebo in adults currently on maximal standard-of-care inhaled therapy (triple therapy) with uncontrolled chronic obstructive pulmonary disease (COPD) and evidence of type 2 inflammation were shared today in the 2023 American Thoracic Society (ATS) International Conference session

New England Journal of Medicine and JAMA. Discussion on the Edge: Reports of Recently Published Pulmonary Research" and simultaneously published in the New England Journal of Medicine(NEJM). These results will also be presented in the "Breaking News: Clinical Trial Results in Pulmonary Medicine

Associate Professor at the University of Alabama at Birmingham Division of Pulmonary, Allergy, and Critical Care Medicine, and a co-principal investigator of the trial

"I've seen patients with uncontrolled chronic obstructive pulmonary disease struggle for far too long with the debilitating symptoms of this progressive disease – with limited, incremental improvement on current treatment options. This trial showed that dupilumab has the potential to impact the vicious cycle of exacerbations and lung function decline in patients with uncontrolled COPD with type 2 inflammation, and significantly improve respiratory symptoms. Dupilumab also helped improve health-related quality of life measures, which, from my years of experience as a physician, are just as meaningful for patients as being able to breathe easier."

COPD is a life-threatening respiratory disease that damages the lungs and causes progressive lung function decline. Symptoms include persistent cough and breathlessness that may not only impair the ability to perform routine daily activities, but can also lead to anxiety, depression and sleep disturbances. COPD is also associated with a significant health and economic burden due to recurrent acute exacerbations that require systemic corticosteroid treatment and/or lead to hospitalization or even death. Smoking and exposure to noxious particles are key risk factors for COPD, but even individuals who quit smoking can still develop or continue having the disease. In the U.S. alone, approximately 300,000 people live with uncontrolled COPD with evidence of type 2 inflammation.

The results presented at ATS and published in NEJM are from the BOREAS trial, which met the primary and all key secondary endpoints. As presented and published, patients receiving Dupixent (n=468) compared to placebo (n=471) added to maximal standard-of-care inhaled triple therapy experienced a:

- 30% reduction in moderate or severe acute COPD exacerbations over 52 weeks ($p<0.001$), the primary endpoint.

- 160 mL improvement in lung function from baseline at 12 weeks versus 77 mL ($p<0.001$).

- Numerical improvements were observed as early as 2 weeks, with the benefit versus placebo sustained through 52 weeks (Dupixent: 153 mL, placebo: 70 mL; $p<0.001$).

- 9.7-point improvement in health-related quality of life (QoL; patient-reported outcome on a scale from 0-100) from baseline at 52 weeks versus a 6.4-point improvement ($p=0.002$), with numerical improvements observed as early as 4 weeks.

- 2.7-point reduction in respiratory symptom severity (patient-reported outcome on a scale from 0-40) from baseline at 52 weeks versus a 1.6-point reduction ($p=0.001$).

In a pre-specified analysis from a subgroup of patients (Dupixent n=195, placebo n=188) with elevated levels (≥20 ppb) of fractional exhaled nitric oxide (FeNO) – an airway biomarker of type 2 inflammation – Dupixent treatment also led to a significant 38% reduction in exacerbations compared to placebo at 52 weeks ($p=0.005$). In this subgroup, Dupixent also led to an improvement in lung function of 232 mL versus 108 mL for placebo at 12 weeks ($p=0.002$) that was sustained at 52 weeks with an improvement in lung function of 247 mL versus 120 mL for placebo ($p=0.003$).

The safety results were generally consistent with the known safety profile of Dupixent in its approved indications. Overall rates of adverse events (AEs) were 77% for Dupixent and 76% for placebo. AEs more commonly observed with Dupixent compared to placebo included headache (8.1% Dupixent, 6.8% placebo), diarrhea (5.3% Dupixent, 3.6% placebo) and back pain (5.1% Dupixent, 3.4% placebo). AEs more commonly observed with placebo compared to Dupixent included upper respiratory tract infection (9.8% placebo, 7.9% Dupixent), hypertension (6.0% placebo, 3.6% Dupixent) and COVID-19 (5.7% placebo, 4.1% Dupixent). AEs leading to deaths were balanced between the two arms (1.7% placebo, 1.5% Dupixent).

The second, replicate Phase 3 trial of Dupixent in COPD with evidence of type 2 inflammation (NOTUS) is ongoing, with data expected in 2024. The safety and efficacy of Dupixent in COPD are currently under clinical investigation and have not been evaluated by any regulatory authority. Sanofi and Regeneron look forward to discussing

the BOREAS data with regulators.

About the Dupixent COPD Phase 3 Trial Program

BOREAS is one of two pivotal trials in the Dupixent COPD program. The randomized, Phase 3, double-blind, placebo-controlled trial evaluated the efficacy and safety of Dupixent in 939 adults who were current or former smokers aged 40 to 80 years with moderate-to-severe COPD. All patients in the trial had evidence of type 2 inflammation, as measured by blood eosinophils ≥300 cells/µL. Patents with a diagnosis or history of asthma were excluded from the trial. During the 52-week treatment period, patients received Dupixent or placebo every two weeks added to a maximal standard-of-care inhaled triple therapy of inhaled corticosteroids (ICS), long-acting beta agonists, and long-acting muscarinic antagonists. Double maintenance therapy was allowed if ICS was contraindicated.

The primary endpoint evaluated the annualized rate of acute moderate or severe COPD exacerbations. Moderate exacerbations were defined as those requiring systemic steroids and/or antibiotics. Severe exacerbations were defined as those: requiring hospitalization; requiring more than a day of observation in an emergency department or urgent care facility; or resulting in death.

Key secondary and other hierarchy endpoints included:

- Change from baseline in lung function (assessed by pre-bronchodilator forced expiratory volume over one second [FEV1]) at 12 and 52 weeks in both the overall population and those with FeNO ≥ 20 ppb.

- Change from baseline at 52 weeks in St. George's Respiratory Questionnaire (SGRQ) total score compared to placebo (scale from 0-100).

- Change from baseline at 52 weeks in the Evaluating Respiratory Symptoms in COPD (E-RS: COPD) scale score (scale from 0-40).

- The annualized rate of acute moderate or severe COPD exacerbations in patients with FeNO ≥ 20 ppb.

About Sanofi and Regeneron's COPD Clinical Research Program

Sanofi and Regeneron are motivated to transform the treatment paradigm of COPD by examining the role different types of inflammation play in the disease progression through the investigation of two potentially first-in-class biologics, Dupixent and itepekimab.

Dupixent inhibits the signaling of the interleukin-4 (IL-4) and interleukin-13 (IL-13) pathways and the program focuses on a specific population of people with evidence of type 2 inflammation. Itepekimab is a fully human monoclonal antibody that binds to and inhibits interleukin-33 (IL-33), an initiator and amplifier of broad inflammation in COPD. Across both programs, four Phase 3 trials are ongoing and designed to inform next-generation treatments for people with COPD who might not have other options.

Itepekimab is currently under clinical investigation and its safety and efficacy have not been evaluated by any regulatory authority.

Dupixent is a fully human monoclonal antibody that inhibits the signaling of the interleukin-4 (IL-4) and interleukin-13 (IL-13) pathways and is not an immunosuppressant. The Dupixent development program has shown significant clinical benefit and a decrease in type 2 inflammation in Phase 3 trials, establishing that IL-4 and IL-13 are key and central drivers of the type 2 inflammation that plays a major role in multiple related and often co-morbid diseases. These diseases include approved indications for Dupixent, such as atopic dermatitis, asthma, chronic rhinosinusitis with nasal polyposis (CRSwNP), eosinophilic esophagitis (EoE) and prurigo nodularis.

Dupixent has received regulatory approvals in one or more countries around the world for use in certain patients with atopic dermatitis, asthma, CRSwNP, EoE or prurigo nodularis in different age populations. Dupixent is currently approved for one or more of these indications in more than 60 countries, including in Europe, the U.S. and Japan. More than 600,000 patients are being treated with Dupixent globally.

Dupilumab Development Program

Dupilumab is being jointly developed by Sanofi and Regeneron under a global collaboration agreement. To date, dupilumab has been studied across more than 60 clinical trials involving more than 10,000 patients with various chronic diseases driven in part by type 2 inflammation.

In addition to the currently approved indications, Sanofi and Regeneron are studying dupilumab in a broad range of diseases driven by type 2 inflammation or other allergic processes in Phase 3 trials, including pediatric EoE, chronic spontaneous urticaria, chronic pruritus of unknown origin, chronic obstructive pulmonary disease with evidence of type 2 inflammation and bullous pemphigoid. These potential uses of dupilumab are currently under clinical investigation, and the safety and efficacy in these conditions have not been fully evaluated by any regulatory authority.

Regeneron (NASDAQ: REGN) is a leading biotechnology company that invents, develops and commercializes life-transforming medicines for people with serious diseases. Founded and led for 35 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to nine FDA-approved treatments and numerous product candidates in development, almost all of which were homegrown in our laboratories. Our medicines and pipeline are designed to help patients with eye diseases, allergic and inflammatory diseases, cancer, cardiovascular and metabolic diseases, pain, hematologic conditions, infectious diseases and rare diseases.

Regeneron is accelerating and improving the traditional drug development process through our proprietary VelociSuite® technologies, such as VelocImmune®, which uses unique genetically humanized mice to produce optimized fully human antibodies and bispecific antibodies, and through ambitious research initiatives such as the Regeneron Genetics Center, which is conducting one of the largest genetics sequencing efforts in the world.

For more information, please visit www.Regeneron.com or follow @Regeneron on Twitter.

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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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.

Regeneron Forward-Looking Statements and Use of Digital Media

This press release includes forward-looking statements that involve risks and uncertainties relating to future events and the future performance of Regeneron Pharmaceuticals, Inc. (“Regeneron” or the “Company”), and actual events or results may differ materially from these forward-looking statements. Words such as “anticipate,” “expect,” “intend,” “plan,” “believe,” “seek,” “estimate,” variations of such words, and similar expressions are intended to identify such forward-looking statements, although not all forward-looking statements contain these identifying words. These statements concern, and these risks and uncertainties include, among others, the nature, timing, and possible success and therapeutic applications of products marketed or otherwise commercialized by Regeneron and/or its collaborators or licensees (collectively, “Regeneron’s Products”) and product candidates being developed by Regeneron and/or its collaborators or licensees (collectively,

) and research and clinical programs now underway or planned, including without limitation Dupixent; the likelihood, timing, and scope of possible regulatory approval and commercial launch of Regeneron’s Product Candidates and new indications for Regeneron’s Products, such as Dupixent for the treatment of chronic obstructive pulmonary disease with evidence of type 2 inflammation as discussed in this press release as well as for the treatment of pediatric eosinophilic esophagitis, chronic spontaneous urticaria, chronic pruritus of unknown origin, bullous pemphigoid, and other potential indications; uncertainty of the utilization, market acceptance, and commercial success of Regeneron’s Products and Regeneron’s Product Candidates and the impact of studies (whether conducted by Regeneron or others and whether mandated or voluntary), including the studies discussed or referenced in this press release, on any of the foregoing or any potential regulatory approval of Regeneron’s Products (such as Dupixent) and Regeneron’s Product Candidates; the ability of Regeneron’s collaborators, licensees, suppliers, or other third parties (as applicable) to perform manufacturing, filling, finishing, packaging, labeling, distribution, and other steps related to Regeneron’s Products and Regeneron’s Product Candidates; the ability of Regeneron to manage supply chains for multiple products and product candidates; safety issues resulting from the administration of Regeneron’s Products (such as Dupixent) and Regeneron’s Product Candidates in patients, including serious complications or side effects in connection with the use of Regeneron’s Products and Regeneron’s Product Candidates in clinical trials; determinations by regulatory and administrative governmental authorities which may delay or restrict Regeneron’s ability to continue to develop or commercialize Regeneron’s Products and Regeneron’s Product Candidates, including without limitation Dupixent; ongoing regulatory obligations and oversight impacting Regeneron’s Products, research and clinical programs, and business, including those relating to patient privacy; the availability and extent of reimbursement of Regeneron’s Products from third-party payers, including private payer healthcare and insurance programs, health maintenance organizations, pharmacy benefit management companies, and government programs such as Medicare and Medicaid; coverage and reimbursement determinations by such payers and new policies and procedures adopted by such payers; competing drugs and product candidates that may be superior to, or more cost effective than,

Regeneron's Products and Regeneron's Product Candidates; the extent to which the results from the research and development programs conducted by Regeneron and/or its collaborators or licensees may be replicated in other studies and/or lead to advancement of product candidates to clinical trials, therapeutic applications, or regulatory approval; unanticipated expenses; the costs of developing, producing, and selling products; the ability of Regeneron to meet any of its financial projections or guidance and changes to the assumptions underlying those projections or guidance; the potential for any license, collaboration, or supply agreement, including Regeneron's agreements with Sanofi and Bayer (or their respective affiliated companies, as applicable) to be cancelled or terminated; the impact of public health outbreaks, epidemics, or pandemics (such as the COVID-19 pandemic) on Regeneron's business; and risks associated with intellectual property of other parties and pending or future litigation relating thereto (including without limitation the patent litigation and other related proceedings relating to EYLEA® (aflibercept) Injection, Praluent® (alirocumab), and REGEN-COV® (casirivimab and imdevimab)), other litigation and other proceedings and government investigations relating to the Company and/or its operations, the ultimate outcome of any such proceedings and investigations, and the impact any of the foregoing may have on Regeneron's business, prospects, operating results, and financial condition. A more complete description of these and other material risks can be found in Regeneron's filings with the U.S. Securities and Exchange Commission, including its Form 10-K for the year ended December 31, 2022 and its Form 10-Q for the quarterly period ended March 31, 2023. Any forward-looking statements are made based on management's current beliefs and judgment, and the reader is cautioned not to rely on any forward-looking statements made by Regeneron. Regeneron does not undertake any obligation to update (publicly or otherwise) any forward-looking statement, including without limitation any financial projection or guidance, whether as a result of new information, future events, or otherwise.

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