



## New Tezepelumab Data Show 86% Reduction In Exacerbations In Patients With Severe Asthma And Comorbid Nasal Polyps

September 5, 2021

### Improvements Also Demonstrated in Lung Function and Nasal Polyp Symptoms Exploratory Analysis From NAVIGATOR Phase 3 Trial Presented at European Respiratory Society (ERS) International Congress 2021

THOUSAND OAKS, Calif., Sept. 5, 2021 /PRNewswire/ -- Amgen (NASDAQ:AMGN) today announced new data from the pivotal NAVIGATOR Phase 3 trial demonstrating that tezepelumab reduced exacerbations and improved lung function and nasal symptoms in patients with severe, uncontrolled asthma and comorbid nasal polyps.<sup>1</sup> Tezepelumab is a potential first-in-class treatment that acts at the top of the inflammatory cascade by targeting thymic stromal lymphopoietin (TSLP), an epithelial cytokine, and has the potential to treat a broad population of patients with severe asthma.<sup>2,3</sup> Tezepelumab is being developed by Amgen in collaboration with AstraZeneca.

The pre-specified exploratory analysis evaluated the effect of tezepelumab in NAVIGATOR patients with or without reported nasal polyps (NP+ or NP-) in the past two years. The analysis showed tezepelumab achieved an 86% reduction in the annualized asthma exacerbation rate (AAER) in NP+ patients (95% CI: 70, 93) and 52% (95% CI: 42, 61) in NP- patients over 52 weeks, compared to placebo when added to standard of care (SoC).<sup>1</sup>

Tezepelumab improved lung function at week 52 in both groups of patients with an increase in pre-bronchodilator forced expiratory volume in one second (FEV1) of 0.20 L (95% CI: 0.02, 0.37) and 0.13 L (95% CI: 0.08, 0.18) versus placebo in NP+ and NP- patients, respectively.<sup>1</sup> Tezepelumab also achieved a clinically relevant improvement in nasal polyp symptoms at week 52, as measured by the Sinonasal Outcome Test (SNOT-22), reducing the SNOT-22 score in NP+ patients by 9.6 points (95% CI: 0.9, 18.2) versus placebo.<sup>1,4</sup> The adjusted mean score reductions from baseline for tezepelumab and placebo were 20.10 points (SE: 3.07) and 10.55 points (SE: 2.94). Baseline mean (sd) SNOT-22 score was 49.4 (21.5) and 47.8 (19.0) for tezepelumab and placebo, respectively.<sup>1</sup>

"This new analysis from NAVIGATOR is exciting for the up to one in five severe asthma patients who have comorbid nasal polyps," said Professor Andrew Menzies-Gow, director of the Lung Division, Royal Brompton Hospital, London, UK, the principal investigator of the NAVIGATOR trial. "The analysis shows tezepelumab's ability to reduce exacerbations, improve lung function and reduce the symptoms of nasal polyps in this comorbid population who are typically more prone to asthma attacks, have an increased likelihood of airway obstruction, and may have a worse quality of life."

"We're thrilled to see significant reductions in exacerbations experienced by patients with severe asthma and comorbid nasal polyps as noted within the latest analysis of NAVIGATOR data," said David M. Reese, M.D., executive vice president of Research and Development at Amgen. "These results further strengthen our confidence in tezepelumab's potential to address a significant unmet need across a broad population of patients with severe asthma, including those with comorbid nasal polyps. We look forward to bringing this potentially transformative treatment to patients soon."

These findings were presented at the European Respiratory Society (ERS) International Congress 2021 between September 5-8. There were no clinically meaningful differences in safety results between the tezepelumab and placebo groups in the NAVIGATOR trial. The most frequently reported adverse events with tezepelumab were nasopharyngitis, upper respiratory tract infection and headache.<sup>5</sup>

Results from the NAVIGATOR Phase 3 trial were published in the [New England Journal of Medicine](#) in May 2021.<sup>5</sup> A Phase 3 clinical trial, WAYPOINT, has been initiated to explore the efficacy and safety of tezepelumab in adults with severe, chronic rhinosinusitis with nasal polyps.<sup>6</sup>

#### About Severe Asthma

Globally, there are approximately 2.5 million patients with severe asthma who are uncontrolled or biologic eligible, with approximately 1 million in the U.S. Many patients with severe asthma have an inadequate response to currently available biologics and oral corticosteroids and thus fail to achieve asthma control.<sup>7,8,9</sup> Uncontrolled asthma occurs when symptoms persist despite treatment. Severe, uncontrolled asthma is debilitating with patients experiencing frequent exacerbations, significant limitations on lung function and a reduced quality of life.<sup>7,8,9</sup> Patients with severe uncontrolled asthma have twice the risk of asthma-related hospitalizations.<sup>10,11</sup> There is also a significant socio-economic burden with these severe uncontrolled asthma patients accounting for 50% of asthma-related costs.<sup>12</sup>

Multiple inflammatory pathways are involved in the pathogenesis of asthma.<sup>13-15</sup> Eosinophilic asthma, and more broadly, T2 inflammation-driven asthma, accounts for about two-thirds of patients with severe asthma.<sup>15</sup> These patients are typically characterized as having elevated levels of inflammatory biomarkers, including blood eosinophils, serum IgE and fractional exhaled nitric oxide (FeNO).<sup>16,17</sup> However, many patients do not fit the criteria for eosinophilic or allergic asthma, may have unclear or multiple drivers of inflammation, and may not qualify for or respond well to a current biologic medicine.<sup>17</sup>

Nasal polyps are benign growths that arise from the mucosa of the nose and paranasal sinuses.<sup>18</sup> Up to 22% of severe asthma patients have comorbid nasal polyps.<sup>19</sup> Nasal polyps can block nasal passages and lead to breathing problems, reduction in the sense of smell, nasal discharge, sleep disturbance and other adverse effects on quality of life.<sup>20-22</sup>

#### About the NAVIGATOR and the PATHFINDER Clinical Trial Program

Building on the Phase 2b PATHWAY trial, the Phase 3 PATHFINDER program included two trials, NAVIGATOR<sup>5,23</sup> and SOURCE.<sup>24,25</sup> The program includes additional planned mechanistic and long-term safety trials.<sup>26</sup> In addition, a Phase 3 clinical trial, WAYPOINT, has been initiated to explore the efficacy and safety of tezepelumab in adults with severe, chronic rhinosinusitis with nasal polyps.<sup>6</sup>

NAVIGATOR is a Phase 3, randomized, double-blinded, placebo-controlled trial in 1,061 adults (18-80 years old) and adolescents (12-17 years old)

with severe, uncontrolled asthma, who were receiving treatment with medium- or high-dose inhaled corticosteroids (ICS) plus at least one additional controller medication with or without OCS. Of the 1,061 randomized patients, 1,059 received either tezepelumab 210 mg (n=528) or placebo (n=531). In total for this pre-specified exploratory analysis, 83 patients had NP in the past 2 years (tezepelumab 210 mg, n=42; placebo, n=41) and 976 did not (tezepelumab 210 mg, n=486; placebo, n=490). NAVIGATOR met the primary endpoint with tezepelumab added to SoC demonstrating a statistically significant and clinically meaningful reduction in the AAER over 52 weeks in the overall patient population, compared to placebo added to SoC. The trial also met the primary endpoint in the subgroup of patients with baseline eosinophil counts less than 300 cells per microliter, with tezepelumab demonstrating a statistically significant and clinically meaningful reduction in AAER in that patient population. Similar reductions in AAER were observed in the subgroup of patients with baseline eosinophil counts less than 150 cells per microliter.<sup>26,27</sup>

NAVIGATOR primary endpoints <sup>5</sup>				
Endpoint	Timepoint	Annual Exacerbation Rate		Results <i>Tezepelumab added to SoC vs placebo added to SoC</i>
		Tezepelumab	Placebo	
AAER – overall patient population	Over 52 weeks	0.93 (95% CI: 0.80, 1.07)	2.10 (95% CI: 1.84, 2.39)	56% reduction (95% CI: 47, 63; p<0.001)
AAER – baseline eosinophil counts < 300 cells/ $\mu$ L	Over 52 weeks	1.02 (95% CI: 0.84, 1.23)	1.73 (95% CI: 1.46, 2.05)	41% reduction (95% CI: 25, 54; p<0.001)

CI: Confidence interval

NAVIGATOR pre-specified exploratory analysis: AAER in patients with severe, uncontrolled asthma with or without nasal polyps in the two years before randomization <sup>1</sup>	
Subgroup	AAER results over 52 weeks <i>Tezepelumab added to SoC versus placebo added to SoC (relative risk reduction and annualized exacerbation rates)</i>
Severe uncontrolled asthma with reported nasal polyps (NP+)	86% reduction (95% CI: 70, 93) • Tezepelumab: 0.39 (95% CI: 0.21, 0.72) • Placebo: 2.76 (95% CI: 1.79, 4.28)
Severe uncontrolled asthma without reported nasal polyps (NP-)	52% reduction (95% CI: 42, 61) • Tezepelumab: 0.98 (95% CI: 0.84, 1.14) • Placebo: 2.05 (95% CI: 1.79, 2.35)

CI: Confidence interval

NAVIGATOR pre-specified exploratory analysis: Pre-bronchodilator FEV1 in patients with severe, uncontrolled asthma with or without nasal polyps in the two years before randomization <sup>1</sup>	
Subgroup	Pre-bronchodilator FEV1 over 52 weeks <i>Tezepelumab added to SoC versus placebo added to SoC (LS mean difference and LS mean change from baseline)</i>
Severe uncontrolled asthma with reported nasal polyps (NP+)	0.20 L (95% CI: 0.02, 0.37) • Tezepelumab: 0.32 (SE: 0.064) • Placebo: 0.13 (SE: 0.064)
Severe uncontrolled asthma without reported nasal polyps (NP-)	0.13 L (95% CI: 0.08, 0.18) • Tezepelumab: 0.22 (SE: 0.019) • Placebo: 0.09 (SE: 0.019)

LS: Least-squares, CI: Confidence interval, SE: Standard error

NAVIGATOR is the first Phase 3 trial to show benefit in severe asthma irrespective of eosinophils by targeting the thymic stromal lymphopoietin (TSLP). The [U.S. Food and Drug Administration Breakthrough Therapy Designation](#) was granted to tezepelumab in September 2018 for patients with severe asthma, without an eosinophilic phenotype.

SOURCE is a Phase 3 multicenter, randomized, double-blinded, parallel-group, placebo-controlled trial for 48 weeks in adult patients with severe asthma who require continuous treatment with ICS plus long-acting beta2-agonists (LABA), and chronic treatment with maintenance OCS therapy. In the trial, patients were randomized to receive tezepelumab 210 mg every four weeks or placebo as add-on therapy, with patients maintained on their currently prescribed ICS plus LABA, with or without other asthma controller therapy.

Patients who participated in the NAVIGATOR and SOURCE trials were eligible to continue in DESTINATION, a Phase 3 extension trial assessing long-term safety and efficacy.<sup>28</sup>

#### About Tezepelumab

Tezepelumab is being developed by AstraZeneca in collaboration with Amgen (see AstraZeneca and Amgen collaboration below) as an investigational, potential first-in-class human monoclonal antibody that works on the primary source of inflammation: the airway epithelium, which is the first point of contact for viruses, allergens, pollutants and other environmental insults. Specifically, tezepelumab targets and blocks thymic stromal lymphopoietin (TSLP), a key epithelial cytokine that sits at the top of multiple inflammatory cascades and initiates an overreactive immune response to allergic, eosinophilic and other types of airway inflammation associated with severe asthma.<sup>2,29</sup>

TSLP is released in response to multiple triggers associated with asthma exacerbations, including allergens, viruses and other airborne particles.<sup>2,29</sup> Expression of TSLP is increased in the airways of patients with asthma and has been correlated with disease severity.<sup>2,3</sup> Blocking TSLP may prevent the release of pro-inflammatory cytokines by immune cells, resulting in the prevention of asthma exacerbations and improved asthma control.<sup>2,3</sup> By

working at the top of the cascade, tezepelumab helps stop inflammation at the source and has the potential to treat a broad population of severe asthma patients.<sup>2,3</sup>

### **About the Amgen and AstraZeneca Collaboration**

In 2020, Amgen and AstraZeneca updated the 2012 collaboration agreement for tezepelumab. Both companies will continue to share costs and profits equally after payment by AstraZeneca of a mid-single-digit royalty to Amgen. AstraZeneca continues to lead development and Amgen continues to lead manufacturing. All aspects of the collaboration are under the oversight of joint governing bodies. Under the amended agreement in North America, Amgen and AstraZeneca will jointly commercialize tezepelumab; Amgen will record sales in the U.S. and AstraZeneca will record sales in Canada. Outside the U.S., Amgen will record sales as collaboration revenue.

### **Amgen Inflammation**

Amgen brings therapies to millions of people with inflammatory diseases, with a focus on serving unmet patient needs. For those with debilitating moderate to severe rheumatoid arthritis, psoriatic arthritis, moderate to severe plaque psoriasis, ankylosing spondylitis, asthma, and other chronic conditions, the suffering and needs are severe. Complex diseases of inflammation have defied simple solutions, and the breadth of inflammatory disease and the burden patients bear is not well understood.

For more than two decades, Amgen has been committed to advancing the science and the understanding around inflammation to address the unmet patient needs that exist and expanding our portfolio. We lead with science through discovery research that is disease-agnostic and biology-first, modality-second. In doing so, we have introduced and evolved novel therapies that have changed the lives of patients.

Our commitment to patients is reflected not only in where we have succeeded, but in where we have failed and opened new doors. Throughout, we have remained dedicated to the principle of leading with science, pursuing where pathways and promising discoveries in inflammation take us, and not relenting until innovative solutions for patients are found. It's a commitment that extends beyond introducing novel therapies. We are focused on improving the entire patient journey.

### **About Amgen**

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

For more information, visit [www.amgen.com](http://www.amgen.com) and follow us on [www.twitter.com/amgen](https://www.twitter.com/amgen).

### **Amgen Forward-Looking Statements**

This news release contains forward-looking statements that are based on the current expectations and beliefs of Amgen. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including any statements on the outcome, benefits and synergies of collaborations, or potential collaborations, with any other company (including BeiGene, Ltd. or any collaboration to manufacture therapeutic antibodies against COVID-19), the performance of Otezla<sup>®</sup> (apremilast) (including anticipated Otezla sales growth and the timing of non-GAAP EPS accretion), or the Five Prime Therapeutics, Inc. acquisition, as well as estimates of revenues, operating margins, capital expenditures, cash, other financial metrics, expected legal, arbitration, political, regulatory or clinical results or practices, customer and prescriber patterns or practices, reimbursement activities and outcomes, effects of pandemics or other widespread health problems such as the ongoing COVID-19 pandemic on Amgen's business, outcomes, progress, or effects relating to studies of Otezla as a potential treatment for COVID-19, and other such estimates and results. Forward-looking statements involve significant risks and uncertainties, including those discussed below and more fully described in the Securities and Exchange Commission reports filed by Amgen, including its most recent annual report on Form 10-K and any subsequent periodic reports on Form 10-Q and current reports on Form 8-K. Unless otherwise noted, Amgen is providing this information as of the date of this news release and does not undertake any obligation to update any forward-looking statements contained in this document as a result of new information, future events or otherwise.

No forward-looking statement can be guaranteed and actual results may differ materially from those Amgen projects. Discovery or identification of new product candidates or development of new indications for existing products cannot be guaranteed and movement from concept to product is uncertain; consequently, there can be no guarantee that any particular product candidate or development of a new indication for an existing product will be successful and become a commercial product. Further, preclinical results do not guarantee safe and effective performance of product candidates in humans. The complexity of the human body cannot be perfectly, or sometimes, even adequately modeled by computer or cell culture systems or animal models. The length of time that it takes for Amgen to complete clinical trials and obtain regulatory approval for product marketing has in the past varied and Amgen expects similar variability in the future. Even when clinical trials are successful, regulatory authorities may question the sufficiency for approval of the trial endpoints Amgen has selected. Amgen develops product candidates internally and through licensing collaborations, partnerships and joint ventures. Product candidates that are derived from relationships may be subject to disputes between the parties or may prove to be not as effective or as safe as Amgen may have believed at the time of entering into such relationship. Also, Amgen or others could identify safety, side effects or manufacturing problems with its products, including its devices, after they are on the market.

Amgen's results may be affected by its ability to successfully market both new and existing products domestically and internationally, clinical and regulatory developments involving current and future products, sales growth of recently launched products, competition from other products including biosimilars, difficulties or delays in manufacturing its products and global economic conditions. In addition, sales of Amgen's products are affected by pricing pressure, political and public scrutiny and reimbursement policies imposed by third-party payers, including governments, private insurance plans and managed care providers and may be affected by regulatory, clinical and guideline developments and domestic and international trends toward managed care and healthcare cost containment. Furthermore, Amgen's research, testing, pricing, marketing and other operations are subject to extensive regulation by domestic and foreign government regulatory authorities. Amgen's business may be impacted by government investigations, litigation and product liability claims. In addition, Amgen's business may be impacted by the adoption of new tax legislation or exposure to additional tax liabilities. If Amgen fails to meet the compliance obligations in the corporate integrity agreement between Amgen and the U.S. government, Amgen could become subject to significant sanctions. Further, while Amgen routinely obtains patents for its products and technology, the protection offered by its patents and patent applications may be challenged, invalidated or circumvented by its competitors, or Amgen may fail to prevail in present and

future intellectual property litigation. Amgen performs a substantial amount of its commercial manufacturing activities at a few key facilities, including in Puerto Rico, and also depends on third parties for a portion of its manufacturing activities, and limits on supply may constrain sales of certain of its current products and product candidate development. An outbreak of disease or similar public health threat, such as COVID-19, and the public and governmental effort to mitigate against the spread of such disease, could have a significant adverse effect on the supply of materials for Amgen's manufacturing activities, the distribution of Amgen's products, the commercialization of Amgen's product candidates, and Amgen's clinical trial operations, and any such events may have a material adverse effect on Amgen's product development, product sales, business and results of operations. Amgen relies on collaborations with third parties for the development of some of its product candidates and for the commercialization and sales of some of its commercial products. In addition, Amgen competes with other companies with respect to many of its marketed products as well as for the discovery and development of new products. Further, some raw materials, medical devices and component parts for Amgen's products are supplied by sole third-party suppliers. Certain of Amgen's distributors, customers and payers have substantial purchasing leverage in their dealings with Amgen. The discovery of significant problems with a product similar to one of Amgen's products that implicate an entire class of products could have a material adverse effect on sales of the affected products and on its business and results of operations. Amgen's efforts to collaborate with or acquire other companies, products or technology, and to integrate the operations of companies or to support the products or technology Amgen has acquired, may not be successful. A breakdown, cyberattack or information security breach could compromise the confidentiality, integrity and availability of Amgen's systems and Amgen's data. Amgen's stock price may be volatile and may be affected by a number of events. Global economic conditions may magnify certain risks that affect our business. Amgen's business performance could affect or limit the ability of the Amgen Board of Directors to declare a dividend or its ability to pay a dividend or repurchase its common stock. Amgen may not be able to access the capital and credit markets on terms that are favorable to it, or at all.

The scientific information discussed in this news release related to Amgen's product candidates is preliminary and investigative. Such product candidates are not approved by the U.S. Food and Drug Administration, and no conclusions can or should be drawn regarding the safety or effectiveness of the product candidates.

Further, any scientific information discussed in this news release relating to new indications for Amgen's products is preliminary and investigative and is not part of the labeling approved by the U.S. Food and Drug Administration for the products. The products are not approved for the investigational use(s) discussed in this news release, and no conclusions can or should be drawn regarding the safety or effectiveness of the products for these uses.

CONTACT: Amgen, Thousand Oaks  
Michael Strapazon, 805-313-5553 (media)  
Trish Rowland, 805-447-5631 (media)  
Arvind Sood, 805-447-1060 (investors)

## References

1. Menzies-Gow A, et al. Tezepelumab efficacy in patients with severe, uncontrolled asthma and comorbid nasal polyps in NAVIGATOR. ERS poster number: PA876. Poster presentation at the European Respiratory Society (ERS) International Congress 2021, 5 September 2021; 13:15-14:15 CEST.
2. Corren J, et al. Tezepelumab in adults with uncontrolled asthma [supplementary appendix; updated April 18, 2019]. *N Engl J Med*. 2017; 377: 936-946.
3. Li Y, et al. Elevated Expression of IL-33 and TSLP in the Airways of Human Asthmatics In Vivo: A Potential Biomarker of Severe Refractory Disease. *J Immunol*. 2018; 200: 2253–2262.
4. Hopkins, C. Psychometric validity of the 22-item Sinonasal Outcome Test. *Clinical Otolaryngology*. 2009; 34, 447–454.
5. Menzies-Gow A, et al. Tezepelumab in Adults and Adolescents with Severe, Uncontrolled Asthma. *N Engl J Med*. 2021; 384: 1800-1809. DOI: 10.1056/NEJMoa2034975.
6. [Clinicaltrials.gov](https://clinicaltrials.gov). Efficacy and Safety of Tezepelumab in Participants With Severe Chronic Rhinosinusitis With Nasal Polyposis (WAYPOINT). Available at: <https://clinicaltrials.gov/ct2/show/NCT04851964>. [Last accessed: July 2021].
7. Wenzel S. Severe Asthma in Adults. *Am J Respir Crit Care Med*. 2005;172;149–60.
8. Chung KF, et al. International ERS/ATS guidelines on definition, evaluation and treatment of severe asthma. *Eur Respir J*. 2014; 43: 343–73.
9. Kupczyk M, Wenzel S. U.S. and European severe asthma cohorts: what can they teach us about severe asthma? *J Intern Med* 2012;272:121–32.
10. Price D, Fletcher M, van der Molen T. Asthma control and management in 8,000 European patients: the REcognise Asthma and Link to Symptoms and Experience (REALISE) survey. *NPJ Prim Care Respir Med*. 2014; 12; 24: 14009.
11. World Allergy Organization (WAO). The management of severe asthma: economic analysis of the cost of treatments for severe asthma. Available at: [https://www.worldallergy.org/educational\\_programs/world\\_allergy\\_forum/anaheim2005/blaiss.php](https://www.worldallergy.org/educational_programs/world_allergy_forum/anaheim2005/blaiss.php) [Last accessed: April 2021].
12. Busse WW. Biological Treatments for Severe Asthma: A Major Advance in Asthma Care. *Allergol Int* 2019; 68: 158–66.
13. Godar M, Blanchetot C, de Haard H, et al. Personalized medicine with biologics for severe type 2 asthma: current status and future prospects. *MAbs*. 2018; 10 (1): 34–45.
14. Rabe KF, Busse W, Pavord I, Castro M. Raising the clinical bar beyond current biologics in uncontrolled persistent asthma: translating emerging data in future clinical decisions. *EMJ Allergy Immunol*. 2018; 3: 60-9.
15. Peters MC, Mekonnen ZK, Yuan S, et al. Measures of gene expression in sputum cells can identify TH2-high and TH2-low subtypes of asthma. *J Allergy Clin Immunol*. 2014; 133: 388–94.
16. [Clinicaltrials.gov](https://clinicaltrials.gov). Study to Evaluate the Efficacy and Safety of Tezepelumab in Reducing Oral Corticosteroid Use in Adults With Oral Corticosteroid Dependent Asthma (SOURCE) [Online]. Available at: <https://clinicaltrials.gov/ct2/show/NCT03406078>. [Last accessed: April 2021].

17. Fahy JV. Type 2 inflammation in asthma--present in most, absent in many. *Nat Rev Immunol*. 2015; 15: 57-65.
18. Newton JR, Ah-See KW. A review of nasal polyposis. *Ther Clin Risk Manag*. 2008; 4 (2): 507-512.
19. Wang E, *et al*. Characterization of Severe Asthma Worldwide. Data from the International Severe Asthma Registry. *Chest*. 2020; 157 (4):790-804 [online supplement].
20. Hopkins C. Chronic Rhinosinusitis with Nasal Polyps. *N Engl J Med*. 2019; 381 (1): 55-63.
21. Stevens WW, Schleimer RP, Kern RC. Chronic Rhinosinusitis with Nasal Polyps. *J Allergy Clin Immunol Pract*. 2016; 4 (4): 565-572.
22. Abdalla S, Alreefy H, Hopkins C. Prevalence of sinonasal outcome test (SNOT-22) symptoms in patients undergoing surgery for chronic rhinosinusitis in the England and Wales National prospective audit. *Clin Otolaryngol*. 2012; 37 (4): 276-282.
23. Menzies-Gow A, *et al*. NAVIGATOR: a phase 3 multicentre, randomized, double-blind, placebo-controlled, parallel-group trial to evaluate the efficacy and safety of tezepelumab in adults and adolescents with severe, uncontrolled asthma. *Respir Res*. 2020; 21: 266.
24. Wechsler ME, *et al*. Oral corticosteroid-sparing effect of tezepelumab in adults with severe asthma. *Am J Respir Crit Care Med*. 2021;203:A1197.
25. Weschler ME, *et al*. SOURCE: A Phase 3, multicentre, randomized, double-blind, placebo-controlled, parallel group trial to evaluate the efficacy and safety of Tezepelumab in reducing oral corticosteroid use in adults with oral corticosteroid dependent asthma. *Respir Res*. 2020; 21: 264.
26. Diver S, *et al*. Effect of Tezepelumab on Airway Inflammation in Patients with Moderate-to-Severe Uncontrolled Asthma: A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study (CASCADE). *Am J Respir Crit Care Med*. 2021;203:A1456.
27. Corren J, Bourdin A, Chupp G, *et al*. Efficacy of tezepelumab in patients with severe, uncontrolled asthma grouped by baseline blood eosinophil count and fractional exhaled nitric oxide level: results from the NAVIGATOR phase 3 study. *Am J Respir Crit Care Med*. 2021;203:A1198.
28. [Clinicaltrials.gov](https://clinicaltrials.gov). Extension Study to Evaluate the Safety and Tolerability of Tezepelumab in Adults and Adolescents With Severe, Uncontrolled Asthma (DESTINATION) [Online]. Available at: <https://clinicaltrials.gov/ct2/show/NCT03706079>. [Last accessed: July 2021].
29. Varricchi G, *et al*. Thymic Stromal Lymphopoietin Isoforms, Inflammatory Disorders, and Cancer. *Front Immunol*. 2018; 9: 1595.



 View original content to download multimedia:<https://www.prnewswire.com/news-releases/new-tezepelumab-data-show-86-reduction-in-exacerbations-in-patients-with-severe-asthma-and-comorbid-nasal-polyps-301368866.html>

SOURCE Amgen