



Horizon Therapeutics plc Initiates Randomized Controlled Clinical Trial Evaluating TEPEZZA® (teprotumumab-trbw) for the Treatment of Chronic (Inactive) Thyroid Eye Disease (TED)

September 7, 2021

DUBLIN--(BUSINESS WIRE)--Sep. 7, 2021-- Horizon Therapeutics plc (Nasdaq: HZNP) today announced that the first patient has been enrolled in a Phase 4 clinical trial evaluating the efficacy and safety of TEPEZZA for the treatment of chronic (inactive) TED. TEPEZZA is the first and only medicine approved by the U.S. Food and Drug Administration (FDA) for the treatment of TED – a serious, progressive and potentially vision-threatening rare autoimmune disease.¹

TED begins with an acute (active) phase where inflammatory signs and symptoms, such as eye pain, swelling, proptosis (eye bulging) and diplopia (double vision), progress over time.^{1,2} The disease then enters a chronic phase where inflammation is no longer present or has markedly diminished, but significant signs and symptoms may remain.

"It is common for patients who are in the chronic phase of the disease to continue having debilitating symptoms, like eye pain and bulging, that interfere with daily living and require treatment," said Raymond Douglas, M.D., Ph.D., trial investigator and director of the Orbital and Thyroid Eye Disease Program, Cedars-Sinai Medical Center. "In a number of published case reports and analyses, TEPEZZA improved Thyroid Eye Disease symptoms, including eye bulging, when administered in the chronic phase. This trial will help us understand these observations in a controlled clinical setting."

This randomized, double-masked, placebo-controlled, parallel-group, multicenter trial will evaluate the efficacy, safety and tolerability of TEPEZZA compared to placebo in treating patients with chronic TED. At the time of the initial screening, all participants must be at least 18 years of age and have had an initial diagnosis of TED for at least three years and less than eight years. Participants cannot have had prior orbital irradiation, orbital decompression or strabismus surgery. Approximately 60 adult participants who meet the trial eligibility criteria will be randomized in a 2:1 ratio to receive an infusion of either TEPEZZA or placebo, 10 mg/kg for the first infusion and 20 mg/kg for the remaining seven infusions, once every three weeks, for a total of eight infusions.

The primary efficacy endpoint is change from baseline at Week 24 in proptosis in the study eye. The trial will also assess proptosis responder rate, diplopia responder rate, change in orbital pain, change in muscle volume and change in the Graves' Ophthalmopathy Quality of Life (GO-QoL) questionnaire appearance and visual functioning subscales. Proptosis non-responders who have completed the treatment period may choose to enter an open-label extension period where they will receive eight infusions of TEPEZZA. More information about the trial, including full eligibility criteria, can be found at [clinicaltrials.gov \(NCT04583735\)](https://clinicaltrials.gov/NCT04583735).

"Thyroid Eye Disease is complex and changes over time, presenting unique challenges at every stage," said Elizabeth H.Z. Thompson, Ph.D., executive vice president, research and development, Horizon. "We have spoken with many patients who continue to struggle with difficult symptoms well into the chronic phase. TEPEZZA is indicated for Thyroid Eye Disease, which includes both acute and chronic phases, and this trial will expand our understanding of the role it can play in helping people living with chronic disease."

About Thyroid Eye Disease (TED)

TED is a serious, progressive and potentially vision-threatening rare autoimmune disease.¹ TED often occurs in people living with Graves' disease, but is a distinct disease that is caused by autoantibodies activating an IGF-1R-mediated signaling complex on cells within the retro-orbital space.^{3,4} This leads to a cascade of negative effects, which may cause long-term, irreversible damage. As TED progresses, the serious damage it can cause includes proptosis (eye bulging), strabismus (misalignment of the eyes) and diplopia (double vision) – and in some cases can lead to blindness.^{2,5}

About TEPEZZA

INDICATION

TEPEZZA is indicated for the treatment of Thyroid Eye Disease.

IMPORTANT SAFETY INFORMATION

Warnings and Precautions

Infusion Reactions: TEPEZZA may cause infusion reactions. Infusion reactions have been reported in approximately 4% of patients treated with TEPEZZA. Reported infusion reactions have usually been mild or moderate in severity. Signs and symptoms may include transient increases in blood pressure, feeling hot, tachycardia, dyspnea, headache and muscular pain. Infusion reactions may occur during an infusion or within 1.5 hours after an infusion. In patients who experience an infusion reaction, consideration should be given to premedicating with an antihistamine, antipyretic, or corticosteroid and/or administering all subsequent infusions at a slower infusion rate.

Preexisting Inflammatory Bowel Disease: TEPEZZA may cause an exacerbation of preexisting inflammatory bowel disease (IBD). Monitor patients with IBD for flare of disease. If IBD exacerbation is suspected, consider discontinuation of TEPEZZA.

Hyperglycemia: Increased blood glucose or hyperglycemia may occur in patients treated with TEPEZZA. In clinical trials, 10% of patients (two-thirds of whom had preexisting diabetes or impaired glucose tolerance) experienced hyperglycemia. Hyperglycemic events should be managed with medications for glycemic control, if necessary. Monitor patients for elevated blood glucose and symptoms of hyperglycemia while on treatment with TEPEZZA. Patients with preexisting diabetes should be under appropriate glycemic control before receiving TEPEZZA.

Adverse Reactions

The most common adverse reactions (incidence \geq 5% and greater than placebo) are muscle spasm, nausea, alopecia, diarrhea, fatigue, hyperglycemia, hearing impairment, dysgeusia, headache and dry skin.

For additional information on TEPEZZA, please see [Full Prescribing Information](#) at [TEPEZZAhcp.com](#).

About Horizon

Horizon is focused on the discovery, development and commercialization of medicines that address critical needs for people impacted by rare, autoimmune and severe inflammatory diseases. Our pipeline is purposeful: we apply scientific expertise and courage to bring clinically meaningful therapies to patients. We believe science and compassion must work together to transform lives. For more information on how we go to incredible lengths to impact lives, please visit www.horizontherapeutics.com and follow us on [Twitter](#), [LinkedIn](#), [Instagram](#) and [Facebook](#).

Forward-Looking Statements

This press release contains forward-looking statements, including, but not limited to, statements related to the potential benefits of TEPEZZA; the expected scope, endpoints and timing of clinical trials and other statements that are not historical facts. These forward-looking statements are based on Horizon's current expectations and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks related to clinical trials, including the fact that prior results may not predict future clinical trial outcomes; impacts of the COVID-19 pandemic and actions taken to slow its spread, including potential delays in clinical trials; regulatory obligations and oversight, including any changes in the legal and regulatory environment in which Horizon operates and those risks detailed from time-to-time under the caption "Risk Factors" and elsewhere in Horizon's filings and reports with the SEC. Horizon undertakes no duty or obligation to update any forward-looking statements contained in this press release as a result of new information.

References

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