gamifant®
emapalumab-lzsg

Gamifant® (emapalumab-lzsg) *is the first and only treatment approved by the U.S. Food and Drug Administration (FDA) indicated specifically to treat primary hemophagocytic lymphohistiocytosis (HLH).* ***The approval of Gamifant marks the first significant improvement in primary HLH induction therapy in 24 years.***

A New Way of Treating Primary HLH

- Gamifant is a monoclonal antibody (mAB) that binds to and neutralizes interferon gamma (IFNγ), which nonclinical data suggest plays a pivotal role in HLH.
- Gamifant is indicated for both adult and pediatric (newborn and older) primary HLH patients with refractory, recurrent or progressive disease, or intolerance to conventional HLH therapy.
- Sobi acquired global rights to Gamifant from Novimmune through an exclusive licensing agreement.

Primary HLH Represents a Significant Unmet Medical Need in the U.S.

- Primary HLH is an **ultra-rare, rapidly-progressive, fatal syndrome of hyper-inflammation** in which massive overexpression of IFNγ is thought to cause the immune system to attack the body's tissues and organs, including the bone marrow, liver, spleen and brain.[1-4]
- It is estimated that **fewer than 100 cases** of primary HLH are diagnosed each year in the U.S.[5]
- Primary HLH usually begins to show symptoms within the first year of life and **can rapidly become lethal if left untreated**, with median survival of less than two months.[1]
- Gamifant is the **first drug specifically developed for primary HLH**, and, as the only drug approved for the treatment of this disease, represents a critical advance for this patient population.
    - Conventional therapy prior to hematopoietic stem cell transplant (HSCT), which is the only possible cure, includes steroids and chemotherapy, which are not specifically approved to treat HLH.[6-7]

Clinical Data Supporting Gamifant U.S. FDA Approval

The U.S. FDA approval of Gamifant was based on results from a global, multicenter, open-label, single-arm, pivotal Phase 2/3 clinical study.

The study enrolled 34 primary HLH patients, of which **80 percent had a genetically confirmed diagnosis**. The efficacy of Gamifant was evaluated in the cohort of **27 patients who were refractory to conventional therapy**. Emapalumab was administered concomitantly with dexamethasone, which could be tapered during the study at the physician's assessment.[8]

The trial **achieved its primary endpoint, with 63 percent of patients (p=0.013) demonstrating an overall response** at the end of treatment, defined as achievement of either a complete or partial response, or HLH improvement. Additionally, 70 percent of patients treated with Gamifant went on to achieve HSCT.[8]

The most common adverse reactions reported during the study were infections (56 percent), hypertension (41 percent), **infusion-related reactions** (27 percent), and fever (24 percent).[8]

Indication and Usage

Gamifant® (emapalumab-lzsg) is an interferon gamma (IFNγ)-blocking antibody indicated for the treatment of adult and pediatric (newborn and older) patients with primary hemophagocytic lymphohistiocytosis (HLH) with refractory, recurrent, or progressive disease or intolerance with conventional HLH therapy.

Important Safety Information

Before initiating Gamifant, patients should be evaluated for infection, including latent tuberculosis (TB). Prophylaxis for TB should be administered to patients who are at risk for TB or known to have positive purified protein derivative (PPD) test result or positive IFNγ release assay.

During Gamifant treatment, patients should be monitored for TB, adenovirus, Epstein-Barr virus (EBV), and cytomegalovirus (CMV) every 2 weeks and as clinically indicated.

Patients should be administered prophylaxis for herpes zoster, Pneumocystis jirovecii, and fungal infections prior to Gamifant administration.

Do not administer live or live attenuated vaccines to patients receiving Gamifant and for at least 4 weeks after the last dose of Gamifant. The safety of immunization with live vaccines during or following Gamifant therapy has not been studied.

Infusion-Related Reactions

Infusion-related reactions, including drug eruption, pyrexia, rash, erythema, and hyperhidrosis, were reported with Gamifant treatment in 27 percent of patients. In one-third of these patients, the infusion-related reaction occurred during the first infusion.

Adverse Reactions

In the pivotal trial, the most commonly reported adverse reactions (≥10 percent) for Gamifant included infection (56 percent), hypertension (41 percent), infusion-related reactions (27 percent), pyrexia (24 percent), hypokalemia (15 percent), constipation (15 percent), rash (12 percent), abdominal pain (12 percent), CMV infection (12 percent), diarrhea (12 percent), lymphocytosis (12 percent), cough (12 percent), irritability (12 percent), tachycardia (12 percent), and tachypnea (12 percent).

Additional selected adverse reactions (all grades) that were reported in less than 10 percent of patients treated with Gamifant included vomiting, acute kidney injury, asthenia, bradycardia, dyspnea, gastro-intestinal hemorrhage, epistaxis, and peripheral edema.

Please see full Prescribing Information for Gamifant at www.gamifant.com.

References

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Additional information about Gamifant is available at www.gamifant.com

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