

EULAR: rilzabrutinib data in IgG4-related disease show reduction in flares and key disease markers; earns Fast Track designation in the US

- New rilzabrutinib data showed a considerable reduction in disease flares despite glucocorticoid withdrawal, in patients with IgG4-related disease, a rare condition
- Rilzabrutinib recently granted orphan drug designation and fast track designation in the US for IgG4-related disease

Paris, June 12, 2025. New data from a phase 2 study showed that treatment with rilzabrutinib led to a considerable reduction in disease flares and other key disease markers, as well as glucocorticoid (GC) sparing, in patients with active IgG4-related disease (IgG4-RD). The results were presented at the European Alliance of Associations for Rheumatology (EULAR) 2025 Congress in Barcelona, Spain, from June 11 to 14, 2025.

John Stone, MD, MPH

Professor of Medicine, Harvard Medical School, the Edward A. Fox Chair in Medicine, Massachusetts General Hospital, and Executive Chairman, The IgG4ward! Foundation

“IgG4-related disease is a progressive immune-mediated rare disease with a significant unmet patient need. While it can inflict irreversible organ damage and can even be fatal in some cases, there are limited approved treatments for this disease. The data presented at EULAR are promising as they support the potential of rilzabrutinib to help manage chronic fibro-inflammatory symptoms, notably by reducing flares and reliance on glucocorticoids in people with IgG4-related disease.”

Key results

The phase 2 study (clinical study identifier: [NCT04520451](#)) was an open-label, proof-of-concept, 52-week study in adult patients with a diagnosis of IgG4-RD according to ACR/EULAR 2019 criteria and an IgG4-RD responder index (RI) of ≥ 2 at screening, with active disease in ≥ 1 organ system, excluding lymph nodes. Most patients received rilzabrutinib 400mg twice daily plus a GC taper over four weeks, followed by rilzabrutinib alone for the remainder of the 52-week period. The following results were observed:

- 70% of patients treated with rilzabrutinib were flare free at week 52 without additional treatments (GCs or immunosuppressants).
- Clinically meaningful improvements in disease activity were observed at week 52 as assessed by ≥ 2 point reductions in IgG4-RD RI.
- IgG4-RD RI reductions were evident as early as week 12 which were sustained at week 52.
- Safety profile of rilzabrutinib was consistent with previous studies, with no new safety signals observed. Treatment-emergent adverse events reported by $\geq 10\%$ of patients include diarrhea, COVID-19, dizziness, dry mouth and nausea.

Alyssa Johnsen, MD, PhD

Global Therapeutic Area Head, Immunology and Oncology Development

“Sanofi is committed to advancing new medicines in immune-mediated rare diseases, including IgG4-related disease. The promising phase 2 study results presented at EULAR strengthen our confidence in rilzabrutinib and its potential to have a meaningful impact on IgG4-related disease symptoms and disease progression. We look forward to our ongoing development program for rilzabrutinib.”

The US Food and Drug Administration (FDA) granted fast track designation (FTD) in May 2025 and [orphan drug designation](#) (ODD) in April 2025 to rilzabrutinib for the treatment of IgG4-RD. FTD is an FDA process designed to facilitate the development, and expedite the review of,

medicines to treat serious conditions and fill unmet medical need. The FDA created this process to help deliver important new drugs to patients earlier, and it covers a broad range of serious illnesses. The US FDA grants ODD to investigational therapies addressing rare medical diseases or conditions that affect fewer than 200,000 people in the US.

Further development and advancement of rilzabrutinib into a phase 3 program is expected to start later this year. Rilzabrutinib is currently under clinical investigation, and its safety and efficacy have not been evaluated by any regulatory authority.

About rilzabrutinib

Rilzabrutinib is a novel, advanced, oral, reversible Bruton's tyrosine kinase (BTK) inhibitor that has the potential to be an effective new medicine for several rare immune-mediated or inflammatory diseases by working to restore immune balance via multi-immune modulation. BTK, expressed in B cells, macrophages, and other innate immune cells, plays a critical role in multiple immune-mediated disease processes and inflammatory pathways. With the application of Sanofi's TAILORED COVALENCY® technology, rilzabrutinib can selectively inhibit the BTK target while potentially reducing the risk of off-target side effects.

About IgG4-RD

IgG4-RD is a progressive, relapsing, chronic immune-mediated rare disease, which can manifest in almost every organ and can lead to organ damage and irreversible dysfunction with a sometimes-fatal outcome. People with IgG4-RD experience frequent flare-ups of the condition characterized by periods of exacerbated symptoms, which are typically managed with off-label GCs and immunosuppressive drugs, such as rituximab. It affects approximately eight out of 100,000 adult patients in the US each year. Due to its rarity and challenges with diagnosis, the global prevalence of IgG4-RD is unknown.

About Sanofi

Sanofi is an R&D driven, AI-powered biopharma company committed to improving people's lives and delivering compelling growth. We apply our deep understanding of the immune system to invent medicines and vaccines that treat and protect millions of people around the world, with an innovative pipeline that could benefit millions more. Our team is guided by one purpose: we chase the miracles of science to improve people's lives; this inspires us to drive progress and deliver positive impact for our people and the communities we serve, by addressing the most urgent healthcare, environmental, and societal challenges of our time.

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