

Current Biologic Therapies for EGPA

Drug Name	Therapy Class	Company	Latest results
Benralizumab (Fasenra)	Humanized IgG1k monoclonal antibody	AstraZeneca, Plc.	Benralizumab, which targets the IL-5 receptor and elicits a natural killer cell-mediated antibody-dependent response against eosinophils, is being studied in a phase 3 trial. ^{7,9} The 52-week study will assess the efficacy and safety of benralizumab compared to mepolizumab.
Mepolizumab (Nucala)	Humanized IL-5 monoclonal antibody	GlaxoSmithKline, Plc.	In a post hoc analysis of 136 participants, 53% of patients with EGPA treated with mepolizumab had achieved remission vs 19% of patients receiving placebo. ³ Mepolizumab is the first agent approved specifically for treatment of EGPA.
Omalizumab (Xolair)	Humanized IgE monoclonal antibody	Genentech, Inc.	In a retrospective study of 18 patients, 55.6% of patients with EGPA treated with omalizumab experienced complete recovery, 38.9% had no improvement. However, omalizumab potentially exacerbated the disease in others due to tapering steroids. ¹²
Reslizumab (Cinqair)	Humanized IL-5 monoclonal antibody	Teva Pharmaceutical Industries Ltd.	A phase 2, open-label study of reslizumab, a monoclonal antibody with the same anti IL-5 target as mepolizumab, is underway. ⁸ In addition to intravenous reslizumab, participants will also receive standard therapy for EGPA, including oral steroids such as prednisone.
Rituximab (Rituxan)	Chimeric anti-CD20 monoclonal antibody	Genentech, Inc.	In a study of 69 patients with EGPA, by 24 months, 54% of the patients had experienced relapse, mostly due to asthma. ¹⁰

EGPA: Eosinophilic Granulomatosis with Polyangiitis; IgG1k: alpha-directed cytolytic monoclonal antibody (IgG1, kappa); IL-5: Interleukin-5; IgE: Immunoglobulin E; CD20: Pan-B cell antigen