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(54) Title: METHODS OF TREATING INFLAMMATORY AND AUTOIMMUNE DISEASES WITH NATALIZUMAB

(57) Abstract: Natalizumab is a safe and efficacious treatment for inflammatory and autoimmune diseases, such as multiple sclerosis, Crohn's Disease, and rheumatoid arthritis. Chain swapping between natalizumab and IgG4 molecules acts to reduce the level of bivalent natalizumab present following administration of natalizumab, and thus to lower the activity of natalizumab in the patient. Differences in IgG4 levels across patients or within a single patient across time may change the pharmacokinetic profile of natalizumab. Patients with lower levels of IgG4 may experience higher nadir levels of natalizumab during a dosing period. Monitoring IgG4 and/or bivalent natalizumab levels, and determining a dose or dosage period based on the monitoring may improve the safety and/or efficacy of natalizumab therapy.

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