AMG 531 is a novel thrombopoiesis-stimulating peptibody that increases platelet production by targeting the TPO receptor. The study described here is an ongoing, open-label extension assessing the safety and efficacy of long-term, weekly, subcutaneous administration of AMG 531 in ITP patients who have completed a previous AMG 531 study. Patients previously treated with AMG 531 receive the same starting dose as the final dose given in the previous study; placebo-treated patients begin the extension with a 1.0 g/kg dose. Doses may be skipped, decreased, maintained, or increased based on platelet response. Patients who achieve a stable dose for at least 3 weeks (later amended to 4 weeks) may be allowed to self-administer the drug. A total of 104 patients have been enrolled; the longest AMG 531 treatment duration is 96 weeks. This planned interim analysis includes 36 patients (safety subset) whose previous study was a phase 2 trial. Data for patients previously enrolled in a phase 3 trial are still blinded. The 25 women and 11 men have a mean age of 50±13 (SD) years; 30 (83%) have had a splenectomy. Twelve patients entered the study using concurrent corticosteroids, which were tapered when the platelet count was >50x10^9/L. Adverse event (AE) profiles were similar for the intervals of weeks 1-24 vs 25-48 and beyond. The most frequent were headache (incidence of 2.0 per 100 weeks of subject exposure for weeks 1-24 vs 1.7 for weeks 25-48), upper respiratory infection (1.3 vs 0.8), and fatigue (0.9 vs 1.0). Four patients had serious treatment-related AEs: vaginal hemorrhage/anemia (withdrawn from treatment), diffuse reticulin formation in the bone marrow (withdrawn), bone pain (continues on treatment), and transverse sinus thrombosis with papilledema and temporary decrease in visual acuity (64-year-old patient with diabetes mellitus and a platelet count of 293x10^9/L at the time of the AE; this patient continues on treatment). No neutralizing antibodies have been detected to date. The efficacy subset consists of 27 patients who completed week 48 or beyond. Both the mean platelet count and the mean dose of AMG 531 have remained stable between weeks 24-48. The mean platelet count was 100x10^9/L ± 4.4 (SE) during weeks 1-24 and 131x10^9/L ± 5.3 (SE) during weeks 25-48. Eleven patients (41%) have had at least one platelet count >450x10^9/L, excluding counts associated with ITP rescue medication. Six of 12 patients were able to discontinue concurrent corticosteroids, and 2 had a >25% dose reduction. Individualized weekly doses of AMG 531 provide a therapeutic option for ITP. Most patients have been able to maintain a safe platelet count and to decrease or discontinue concurrent corticosteroid therapy.

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Simultaneous Session: Immune Thrombocytopenic Purpura (ITP) and Its Treatment (1:30 PM-3:00 PM)