Supplementary material

Patients Who Underwent Splenectomy

Patient A. Prior to developing ITP, patient experienced Grade 2 autoimmune hemolytic anemia (hemoglobin 86 g/L) on study that resolved spontaneously. ITP then presented as petechiae and ecchymoses, and initially responded to steroids. However, platelet counts fell each time the steroid dose was decreased over several months. Eight months after ITP onset, the patient developed pancytopenia and Grade 3 sepsis; once the infection was resolved with intravenous broad-spectrum antibiotics, the patient underwent splenectomy. Platelet counts remained within normal limits after the surgery through last follow-up 2.5 years later.

Patient B. Patient experienced chronic, asymptomatic ITP over 3 years, which was treated with variable doses of prednisone. Due to ITP recurrence and worsening intensity, splenectomy was undertaken after the extension study had ended. A normal platelet count was reported after the surgery.

Delayed Recurrence

Patient C. Initial onset was during CAMMS223 (16 months after the last alemtuzumab course) and resolved spontaneously without treatment. The patient experienced a second transient drop in platelet count 10 months later that also resolved spontaneously. Eight years after the last alemtuzumab course and 18 months after starting fingolimod, the patient had an ITP recurrence and was treated with intravenous steroids and platelet transfusion. Fingolimod treatment was continued for 3 months after ITP recurrence, temporarily discontinued, and resumed 5 months after ITP treatment.

Postmarketing Deaths

Patient D. The first death due to ITP in the postmarketing setting was reported in 2016. ITP developed 6 months after the second course of alemtuzumab and was treated with steroids and romiplostim, IVIg, and eltrombopag. The patient suffered a non-complicated intracranial (subarachnoid) hemorrhage and was treated with IVIg, rituximab, steroids, eltrombopag, and cyclosporine. The patient underwent splenectomy 2.5 months after ITP onset, after which abdominal bleeding was reported. Two weeks after splenectomy, the patient died of cerebral/cerebellar hemorrhage.

Patient E. The second postmarketing death due to ITP was reported in 2018. The patient developed ITP 10 months after initiating treatment with alemtuzumab, was asymptomatic, and treated with steroids. Platelet counts initially recovered, but the patient then developed pancytopenia due to aplastic marrow, and autoimmune myelofibrosis, 2 months after the initial ITP event, and was treated with steroids, immunoglobulins, rituximab, and plasmapheresis. Six months later, the patient was admitted to the hospital for fever but left against medical advice. The patient subsequently died; the suspected cause was bacterial sepsis.