Intravenous immunoglobulin (IVIg) is used to treat autoimmune diseases, such as immune thrombocytopenia (ITP). IVIg is a limited resource, and its dosage and cost are both high. Although considered safe, it is a pooled plasma-derived blood product and will always carry a theoretical risk of transferring infectious disease. Thus, it would be highly desirable to improve the efficacy of IVIg or develop monoclonal antibodies capable of mimicking the clinical effects of IVIg. To explore the potential for monoclonal antibodies as a treatment for autoimmunity, we tested a spectrum of antibodies and found that several antibodies specific for the CD44 homing antigen were effective in ITP and arthritis. The results and implications of this work will be discussed.