Monday, September 11, 2023 8:30 a.m. – 9:05 a.m. PT

Development of ANX007, a Novel anti-C1q Fab Fragment for the Treatment of Complement-Mediated Ocular Diseases

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Annexon Biosciences is developing novel therapeutics that bind complement component 1q (C1q), thereby modulating the activity of the classical complement pathway, while leaving the function of the lectin and alternate pathways intact. ANX007 is a recombinant humanized antigen binding fragment (Fab) of a monoclonal antibody, composed of one variable region of the heavy chain and CH1 segment of an immunoglobulin G (IgG1) heavy chain covalently linked to one kappa light chain. ANX007 has a molecular weight of approximately 48K Da and binds to C1q with high affinity. ANX007 is being developed as an intravitreally (IVT) administered agent for the treatment for ophthalmologic diseases such as glaucoma and geographic atrophy (GA). ANX007 has been well tolerated in administration to 20 patients with glaucoma in two completed Phase 1 clinical studies and 181 patients with geographic atrophy in a Phase 2 clinical study. Nonclinical strategy and toxicology data will be reviewed, which included building on systemic toxicology data from the parent full-length mAb. Clinical Phase 1 and Phase 2 data will also be reviewed.