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- (71) **Applicant: REGENERON PHARMACEUTICALS, INC.** [US/US]; 777 Old Saw Mill River Road, Tarrytown, NY 10591 (US).
- (72) **Inventors: CHALOTHORN, Dan;** 777 Old Saw Mill River Road, Tarrytown, NY 10591 (US). **MORTON, Lori;** 777 Old Saw Mill River Road, Tarrytown, NY 10591 (US).
- (74) **Agent: CLARKE, Marcie, B.** et al.; McCarter & English, LLP, 265 Franklin Street, Boston, MA 02110 (US).
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(54) **Title:** FACTOR XI A2 DOMAIN-BINDING ANTIBODIES AND METHODS OF USE THEREOF

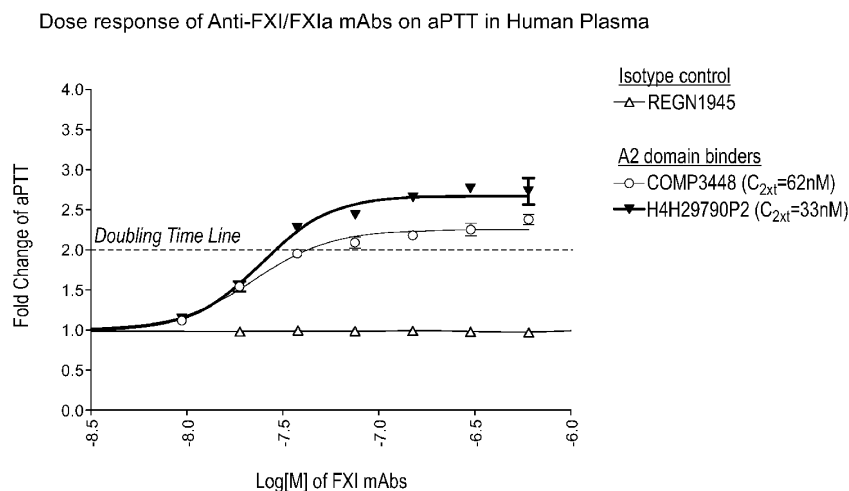


FIG. 1

(57) **Abstract:** The present disclosure provides antibodies that bind to the A2 domain of Factor XI (FXI) and methods of using the same. According to certain embodiments, the antibodies are antagonist antibodies that inhibit blood clot formation via the intrinsic pathway without affecting hemostasis, as shown by their effect on prolonging aPTT without affecting PT. As such, these antagonist antibodies may be used to treat blood clotting diseases or disorders or treatment regimens that have clot formation as a risk factor, such as, but not limited to atrial fibrillation. In certain embodiments, the disclosure includes antibodies that bind FXI and mediate clot formation or thrombogenesis. The antibodies of the disclosure may be fully human, non-naturally occurring antibodies.

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