

CLAIMS

1. A method of treating or preventing an Influenza A infection in a subject, the method comprising administering to the subject a single dose of a pharmaceutical composition comprising an antibody, wherein the antibody comprises a light chain amino acid sequence according to SEQ ID NO:10 and a heavy chain amino acid sequence according to SEQ ID NO:9.

2. The method of claim 1, wherein the pharmaceutical composition comprises the antibody at a concentration in a range from 100 mg/mL to 200 mg/mL, such as 100 mg/mL, 110 mg/mL, 120 mg/mL, 130 mg/mL, 140 mg/mL, 150 mg/mL, 160 mg/mL, 170 mg/mL, 180 mg/mL, 190 mg/mL, or 200 mg/mL, preferably 150 mg/mL.

3. The method of claim 1 or 2, wherein the single dose comprises 3, 4, 5, 6, or 7, preferably 5, mg of the antibody per kg of the subject's body weight.

4. The method of any one of claims 1-3, wherein the single dose comprises up to 60 mg, up to 300 mg, up to 1200 mg, up to 1800 mg, or up to 3000 mg of the antibody.

5. The method of any one of claims 1-4, wherein the single dose comprises up to 60 mg, up to 70 mg, up to 80 mg, up to 90 mg, up to 100 mg, up to 200 mg, up to 300 mg, up to 400 mg, up to 500 mg, up to 600 mg, up to 700 mg, up to 800 mg, up to 900 mg, up to 1000 mg, up to 1100 mg, up to 1200 mg, up to 1300 mg, up to 1400 mg, up to 1500 mg, up to 1600 mg, up to 1700 mg, up to 1800mg, up to 2,000 mg, up to 2,500 mg, or up to 3000mg, of the antibody.

6. The method of any one of claims 1-5, wherein the antibody is administered at a dose of 60 mg, 300 mg, 1200 mg, or 1800 mg.

7. The method of any one of claims 1-5, wherein the antibody is administered at a dose of 300 mg, 400 mg, 500 mg, 600 mg, 700 mg, 800 mg, 900 mg, 1100 mg, or 1200 mg.

8. The method of any one of claims 1-7, wherein:
 - (i) the single dose comprises 300 mg of the antibody, wherein the pharmaceutical composition comprises the antibody at 150 mg/mL, and the dose is administered by a single injection comprising 2 mL of the pharmaceutical composition;
 - (ii) the single dose comprises 1200 mg of the antibody, wherein the pharmaceutical composition comprises the antibody at 150 mg/mL, and the dose is administered by two injections each comprising 4 mL of the pharmaceutical composition;
 - (iii) the single dose comprises 1800 mg of the antibody, wherein the pharmaceutical composition comprises the antibody at 150 mg/mL, and the dose is administered by three injections each comprising 4 mL of the pharmaceutical composition; or
 - (iv) the single dose comprises 60 mg of the antibody, wherein the pharmaceutical composition comprises antibody at 150 mg/mL, and the dose is administered by one injection comprising 0.4 mL of the pharmaceutical composition.
9. The method of any one of claims 1-8, wherein the subject is human.
10. The method of any one of claims 1-9, wherein the method comprises intramuscular (IM) injection.
11. The method of any one of claims 1-10, wherein the pharmaceutical composition further comprises water (*e.g.*, USP water for injection, or US sterile water for injection).
12. The method of any one of claims 1-11, wherein the pharmaceutical composition further comprises histidine, optionally at a concentration in a range from 10 mM to 40 mM, preferably 20 mM, in the pharmaceutical composition.
13. The method of any one of claims 1-12, wherein the pharmaceutical composition further comprises a sugar, such as a disaccharide, such as sucrose, optionally in a range from 3.0% to 9.0% (w/v), preferably in a range from 3.6% to 8.6%, more preferably in a range from 4% to 6%.
14. The method of any one of claims 1-13, wherein the pharmaceutical composition further comprises a surfactant or a triblock copolymer, optionally a polysorbate or poloxamer 188, preferably polysorbate 80 (PS80), optionally in a range from 0.01% to 0.05% (w/v), preferably 0.02% (w/v).

15. The method of any one of claims 1-14, wherein the pharmaceutical composition has a pH in a range from 5.5 to 6.5, or in a range from 5.8 to 6.2, or a pH of 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3, 6.4, or 6.5, preferably of 6.0.

16. The method of any one of claims 1-15, wherein the single dose comprises from 0.8 mL to 4 mL per injection.

17. The method of claim 16, wherein the single dose comprises or consists of 0.8 mL, 0.9 mL, 1.0 mL, 1.1 mL, 1.2 mL, 1.3 mL, 1.4 mL, 1.5 mL, 1.6 mL, 1.7 mL, 1.8 mL, 1.9 mL, 2.0 mL, 2.1 mL, 2.2 mL, 2.3 mL, 2.4 mL, 2.5 mL, 2.6 mL, 2.7 mL, 2.8 mL, 2.9 mL, 3.0 mL, 3.1 mL, 3.2 mL, 3.3 mL, 3.4 mL, 3.5 mL, 3.6 mL, 3.7 mL, 3.8 mL, 3.9 mL, or 4.0 mL of the composition per injection.

18. The method of any one of claims 1-17, wherein at about 4 weeks, at about 12 weeks, and/or about 20 weeks following administering the pharmaceutical composition to the subject, the subject:

(i) has a reduced number and/or severity of a respiratory symptom selected from: cough, sore throat, rhinorrhea, congestion, or any combination thereof, and/or

(ii) has a reduced number and/or severity of a systemic symptom selected from: fever [oral temperature $>38^{\circ}\text{C}$ (100.4°F)]; chills; myalgia; headache; malaise; fatigue; or any combination thereof,

as compared to a reference subject over a same time period who received a placebo or did not receive a therapy or vaccine for influenza A.

19. The method of any one of claims 1-18, wherein the subject is from 18 years to 65 years of age and has a body mass index in a range from 18 kg/m^2 to 32 kg/m^2 or in a range from 18 kg/m^2 to 35 kg/m^2 .

20. The method of any one of claims 1-19, comprising administering the single dose comprising the pharmaceutical composition once to the subject during a six-month period.

21. The method of any one of claims 1-20, comprising administering a single dose comprising the pharmaceutical composition once to the subject during a twelve-month period.

22. The method of any one of claims 1-20, comprising administering a single dose comprising the pharmaceutical composition twice to the subject during a six-month period, such as once every three months.

23. The method of any one of claims 1-22, comprising administering the single dose comprising the pharmaceutical composition within 1-2 months (*i.e.*, within 30 days to within 60 days) prior to the beginning of an influenza season, or within the first 1-2 months of the influenza season.

24. The method of any one of claims 1-23, wherein the antibody, or the pharmaceutical composition comprising the antibody, has an *in vitro* influenza inhibition of infection IC₉₀ of about 2.17 µg/mL.

25. The method of any one of claims 1-24, wherein:

(i) the administered pharmaceutical composition comprises 60 mg of the antibody, and the antibody is present in serum from the subject at a concentration from about 1 µg/mL to about 7 µg/mL for up to 120 days following administration;

(ii) the administered pharmaceutical composition comprises 300 mg of the antibody, and the antibody is present in serum from the subject at a concentration from about 8 µg/mL to about 20 µg/mL for up to 120 days following administration;

(iii) the administered pharmaceutical composition comprises 1200 mg of the antibody, and the antibody is present in serum from the subject at a concentration from about 50 to µg/mL to about 100 µg/mL for up to 120 days following administration;

(iv) the administered pharmaceutical composition comprises 1800 mg of the antibody, and the antibody is present in serum from the subject at a concentration from about 70 to µg/mL to about 110 µg/mL for up to 120 days following administration; and/or

(v) the antibody has an *in vivo* $t_{1/2}$ in the subject of from 49 to 68 days.

26. The method of any one of claims 1-25, wherein the antibody of the pharmaceutical composition has an *in vivo* $t_{1/2}$ in a human subject of from 49 to 68 days, such as 49 days, 50 days, 51 days, 52 days, 53 days, 54 days, 55 days, 56 days, 57 days, 58 days, 59 days, 60 days, 61 days, 62 days, 63 days, 64 days, 65 days, 66 days, 67 days, or 68 days.

27. The method of any one of claims 1-26, wherein the subject does not experience an adverse event (AE), according to the Common Terminology Criteria for Adverse Events

(CTCAE), optionally for up to 140 days after the single dose of the pharmaceutical composition is administered.

28. The method of any one of claims 1-27, wherein the subject does not experience a moderate adverse event (AE), according to the Common Terminology Criteria for Adverse Events (CTCAE), optionally for up to 140 days, after the single dose of the pharmaceutical composition is administered.

29. The method of any one of claims 1-28, wherein the subject does not experience a serious adverse event (AE), according to the Common Terminology Criteria for Adverse Events (CTCAE), optionally for up to 140 days, after the single dose of the pharmaceutical composition is administered.

30. The method of any one of claims 1-29, wherein:

(i) the single dose comprises 300 mg of the antibody, wherein the pharmaceutical composition comprises the antibody at 150 mg/mL, and the single dose comprises a single injection comprising 2 mL of the pharmaceutical composition;

(ii) the single dose comprises 1200 mg of the antibody, wherein the pharmaceutical composition comprises the antibody at 150 mg/mL, and the single dose comprises two injections each comprising 4 mL of the pharmaceutical composition;

(iii) the single dose comprises 1800 mg of the antibody, wherein the pharmaceutical composition comprises the antibody at 150 mg/mL, and the single dose comprises three injections each comprising 4 mL of the pharmaceutical composition; or

(iv) the single dose comprises 60 mg of the antibody, wherein the pharmaceutical composition comprises antibody at 150 mg/mL, and the single dose comprises 0.4 mL of the pharmaceutical composition.

31. A pharmaceutical composition comprising an antibody that comprises a light chain amino acid sequence according to SEQ ID NO:10 and a heavy chain amino acid sequence according to SEQ ID NO:9, wherein the antibody is present in the composition at a concentration in a range from 100 mg/mL to 200 mg/mL, such as 100 mg/mL, 110 mg/mL, 120 mg/mL, 130 mg/mL, 140 mg/mL, 150 mg/mL, 160 mg/mL, 170 mg/mL, 180 mg/mL, 190 mg/mL, or 200 mg/mL, preferably 150 mg/mL.

32. The pharmaceutical composition of claim 31, wherein the pharmaceutical composition further comprises water (*e.g.*, USP water for injection, or US sterile water for injection).

33. The pharmaceutical composition of claim 31 or 32, further the pharmaceutical composition further comprises histidine, optionally at a concentration in a range from 10 mM to 40 mM, preferably 20mM, in the composition.

34. The pharmaceutical composition of any one of claims 31-33, the pharmaceutical composition further comprises a sugar, such as a disaccharide, such as sucrose, optionally in a range from 3.0% to 9.0% (w/v), preferably from 3.6% to 8.6%, more preferably in a range from 4% to 6%.

35. The pharmaceutical composition of any one of claims 31-34, the pharmaceutical composition further comprises a surfactant or a triblock copolymer, optionally a polysorbate or poloxamer 188, preferably polysorbate 80 (PS80), optionally in a range from 0.01% to 0.05% (w/v), preferably 0.02%.

36. The pharmaceutical composition of any one of claims 31-35, wherein the composition has a pH in a range from 5.5 to 6.5, or in a range from 5.8 to 6.2, or a pH of 5.5, 5.6, 5.7, 5.8, 5.9, 6.0, 6.1, 6.2, 6.3, 6.4, or 6.5, preferably of 6.0.

37. A, preferably glass, vial comprising the pharmaceutical composition of any one of claims 31-36.

38. A syringe comprising the pharmaceutical composition of any one of claims 31-36.