

CLAIMS

What is claimed is:

1. ~~A method of altering cytokine expression comprising administering to the subject in need thereof~~ Use of a composition comprising a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for altering cytokine expression in a subject.
2. ~~A method of inhibiting or altering neutrophil binding and/or adhesion comprising administering to the subject in need thereof~~ Use of a composition comprising a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for inhibiting or altering neutrophil binding and/or adhesion in a subject.
3. ~~A method of improving neutrophil survival comprising administering to the subject in need thereof~~ Use of a composition comprising a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for improving neutrophil survival in a subject.
4. ~~A method of inhibiting or altering neutrophil binding to cell surface receptors comprising administering to the subject in need thereof~~ Use of a composition comprising a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for inhibiting or altering neutrophil binding to cell surface receptors in a subject.
5. ~~A method of treating a disease or condition characterized by an altered expression of a cell surface receptor comprising administering~~ Use of a composition comprising a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for treating a disease or condition characterized by an altered expression of a cell surface receptor.
6. ~~A method of treating and/or preventing acute lung injury and/or acute respiratory distress syndrome comprising administering~~ Use of a composition comprising a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for treating and/or preventing acute lung injury and/or acute respiratory distress syndrome.

7. ~~A method of treating and/or preventing an ocular disease and/or condition characterized by dysregulated complement activation and/or neutrophil modulation comprising administering~~Use of a composition comprising a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for treating and/or preventing an ocular disease and/or condition characterized by dysregulated complement activation and/or neutrophil modulation.

8. ~~A method of treating asthma comprising administering a composition comprising~~Use of a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacturer of a medicament for treating asthma.

5 9. ~~A method of modulating angiogenesis comprising administering a composition comprising~~Use of a therapeutically effective amount of a synthetic peptide comprising SEQ ID NO: 2 and/or 3 in the manufacture of a medicament for modulating angiogenesis.

10. The ~~methods-use~~use of any of claims 1-9, wherein the composition further comprises at least one pharmaceutically acceptable carrier, diluent, stabilizer, or excipient.

11. The ~~methods-use~~use of any of claims 1-10, wherein the therapeutically effective amount of SEQ ID NO: 2 and/or 3 is about 10 mg/kg to about 160 mg/kg.

12. The ~~methods-use~~use of any of claims 1-10, wherein the therapeutically effective amount of SEQ ID NO: 2 and/or 3 is about 20 mg/kg to about 160 mg/kg.

13. The ~~methods-use~~use of any of claims 1-10, wherein the therapeutically effective amount of SEQ ID NO: 2 and/or 3 is about 40 mg/kg to about 160 mg/kg.

14. The ~~methods-use~~use of any of claims 1-10, wherein the therapeutically effective amount of SEQ ID NO: 2 and/or 3 is to be administered in at least one dose, the first dose comprising about 10 mg/kg to about 160 mg/kg SEQ ID NO: 2 and/or 3.

15. The ~~method-use~~use of claim 14, wherein a second dose comprising a therapeutically effective amount of SEQ ID NO: 2 and/or 3 is to be administered, the second dose comprising about 40 mg/kg to about 60 mg/kg SEQ ID NO: 2 and/or 3.

16. The ~~method-use~~use of any of claims 1-10, wherein the therapeutically effective amount of SEQ ID NO: 2 and/or 3 is to be administered in two doses, the first dose comprising about 10 mg/kg to

about 160 mg/kg SEQ ID NO: 2 and/or 3 and the second dose comprising about 40 mg/kg to about 60 mg/kg SEQ ID NO: 2 and/or 3.

17. The ~~method~~-use of any of claims 1-16, wherein the composition is formulated for ophthalmic administration.

18. The ~~method~~-use of claim 17, wherein the composition further comprises an ophthalmically acceptable carrier and/or excipient.

19. The ~~method~~-use of claim 17 or 18, wherein the ophthalmic administration comprises topical administration, periocular injection, subconjunctival injection, intra-aqueous injection, intraocular injection, intravitreal injection, or introduction of an intracorneal or intraocular implant.

20. The ~~method~~-use of claim 4, wherein the cell surface receptor comprises an integrin or an intercellular adhesion molecule (ICAM).

21. The ~~method~~-use of claim 20, wherein the ICAM comprises ICAM-1, ICAM-3, ICAM-4, and/or ICAM-5.

22. The ~~method~~-use of claim 5, wherein the disease or condition is characterized by an increase in at least one of ICAM-1, ICAM-3, ICAM-4, and/or ICAM-5.

23. The ~~method~~-use of claim 7, wherein the ocular disease or condition is characterized by complement inhibition and/or inhibition of myeloperoxidase activity or NETosis. 24. The method of claim 7, wherein the ocular disease or condition is autoimmune and infectious uveitis, acute macular degeneration (AMD), dry eye disease (DED), infectious and non-infectious keratitis, corneal injury and repair, retinopathy of prematurity (ROP), ocular graft versus host disease (GvHD), diabetic retinopathy, macular edema following retinal vein occlusion (RVO) and diabetic macular edema (DME).

24. The ~~method~~-use of claim 8, wherein the asthma is severe asthma, steroid-refractory asthma, or neutrophilic asthma.

25. The ~~method~~-use of any of claims 1-16, wherein the composition is formulated for nasal administration.

26. The ~~method~~-use of claim 25, wherein the nasal administration comprises inhalation, insufflation, or nebulization.

27. The ~~method~~use of claim 25, wherein the composition is in the form of a spray, solution, gel, cream, lotion, aerosol or solution for a nebulizer, or as a microfine powder for insufflation.