time administration. In some cases, the method further comprises agitating the suspension to ensure even distribution prior to the administering step. In some cases, the method further comprises warming the suspension to room temperature prior to the administering step. In some cases, the suspension further comprises a surfactant. In some cases, the surfactant is selected from polysorbates, sodium dodecyl sulfate, sodium lauryl sulfate, lauryl dimethyl amine oxide, polyethoxylated alcohols, polyoxyethylene sorbitan, octoxynol, Brij, pluronic, and polyoxyl castor oil. In some cases, the suspension further comprises phenol, mannitol, sorbitol, or sodium chloride. In some cases, the method further comprises administering an antibiotic solution or an atropine sulfate ointment after the injection. In some cases, the antibiotic solution comprises ciprofloxacin. In some cases, the anti-VEGF polypeptide is a humanized monoclonal antibody. In some cases, the anti-VEGF polypeptide is an antibody fragment or Fab. In some cases, the humanized monoclonal antibody is ranibizumab or bevacizumab. In some cases, the anti-VEGF polypeptide is a soluble, truncated form of VEGF receptor 1 (sVEGFR-1).

[0007a] In one aspect, the present disclosure refers to use of a unit dose of a pharmaceutical composition in the manufacture of a medicament for treating an eye disease or condition, wherein the medicament is to be administered by intravitreal injection to an eye of a primate subject in need thereof, and wherein the pharmaceutical composition comprises:

a) a rAAV2 variant comprising an amino acid sequence LGETTRP inserted between positions 587 and 588 of capsid protein VP1, a nucleic acid encoding (i) a sequence having at least 95% identity to SEQ ID NO: 9 and (ii) a sequence having at least 95% identity to SEQ ID NO: 10, and

(b) a pharmaceutically acceptable excipient; and

wherein the eye condition or disease is choroidal neovascularization, neovascular (wet) age-related macular degeneration (AMD), macular edema following retinal vein occlusion, diabetic macular edema (DME), retinal vein occlusion, or diabetic retinopathy associated with DME; and wherein the nucleic acid encodes a functional anti-VEGF agent.

[0008] Disclosed is a method of treating an eye condition or disease, the method comprising: agitating a suspension composition, comprising: a rAAV having a variant capsid protein comprising an insertion of amino acid sequence selected from LGETTRP, NETITRP, KAGQANN, KDPKTTN, KDTDTTR, RAGGSVG, AVDTTKF, and STGKVPN at a position that corresponds to amino acids 570-611 of capsid protein VP1 in AAV2; and a heterologous sequence encoding an anti-vascular endothelial growth factor (anti-VEGF) polypeptide; and administering the suspension composition to an eye of a human subject via injection. In some cases, the insertion is LGETTRP between amino acids 587 and 588 of AAV2. In some cases, the subject is characterized as having been pre-treated with ranibizumab or bevacizumab. In some cases, the subject is responsive to at least one of ranibizumab and bevacizumab. In some cases, the anti-VEGF polypeptide is a humanized monoclonal antibody. In some cases, the anti-VEGF polypeptide is an antibody fragment or Fab. In some cases, the humanized monoclonal antibody is ranibizumab or bevacizumab. In some cases, the anti-VEGF polypeptide is a soluble, truncated form of VEGF receptor 1 (sVEGFR-1). In some cases, the volume administered to the subject is not more than 50 µL. In some cases, the volume administered to the subject is not more than 100 µL. In some cases, the volume comprises a unit dose of between 1E12 to 1E13 vector genomes. In some cases, the volume comprises a unit dose of between 2E12 to 6E12 vector genomes. In some case, the administering step occurs not more than once in at least 2 years. In some cases, the administering step is a one-time injection. In some cases, the method further comprises assaying the subject for responsiveness to at least one approved therapy before administering the composition. In some cases, the approved therapy comprises ranibizumab and bevacizumab. In some cases, the suspension comprises a

CLAIMS

WHAT IS CLAIMED IS:

1. Use of a unit dose of a pharmaceutical composition in the manufacture of a medicament for treating an eye disease or condition, wherein the medicament is to be administered by intravitreal injection to an eye of a primate subject in need thereof, and wherein the pharmaceutical composition comprises:

   a) a rAAV2 variant comprising an amino acid sequence LGETTRP inserted between positions 587 and 588 of capsid protein VP1, a nucleic acid encoding (i) a sequence having at least 95% identity to SEQ ID NO: 9 and (ii) a sequence having at least 95% identity to SEQ ID NO: 10, and

   (b) a pharmaceutically acceptable excipient; and

   wherein the eye condition or disease is choroidal neovascularization, neovascular (wet) age-related macular degeneration (AMD), macular edema following retinal vein occlusion, diabetic macular edema (DME), retinal vein occlusion, or diabetic retinopathy associated with DME; and

   wherein the nucleic acid encodes a functional anti-VEGF agent.

2. The use of claim 1, wherein the unit dose is between 2E12 to 6E12 vector genomes.

3. The use of claim 1, wherein the unit dose is between 1E8 to 3E14 vector genomes.

4. The use of claim 1, wherein the unit dose is between 1E9 to 3E13 vector genomes.

5. The use of claim 1, wherein the unit dose is between 1E10 to 1E13 vector genomes.

6. The use of any one of claims 1-5, wherein the subject is a human.

7. The use of any one of claims 1-6, wherein the eye condition or disease is choroidal neovascularization or neovascular (wet) AMD.

8. The use of any one of claims 1-7, wherein injection of the medicament results in a reduction in percentage of grade IV lesions by at least 5% as compared to a vehicle control, as measured by color fundus photography.

9. The use of claim 8, wherein the reduction in percentage of grade IV lesions is at least 10%.

10. The use of any one of claims 1-9, wherein the unit dose has a volume that is not more than 100 μL.

11. The use of claim 10, wherein the unit dose has a volume that is not more than 50 μL.

12. The use of any one of claims 1-11, wherein the subject is responsive to at least one of ranibizumab, bevacizumab, and sVEGFR-1.

13. The use of any one of claims 1-12, wherein the subject has been pre-treated with ranibizumab or bevacizumab.

14. The use of any one of claims 1-13, wherein the injection occurs not more than once in at least 2 years.

15. The use of claim 14, wherein the injection occurs not more than once in at least 5 years.

16. The use of any one of claims 1-13, wherein the injection is a one-time injection.

17. The use of any one of claims 1-16, wherein the pharmaceutical composition is a suspension.

18. The use of claim 17, further comprising agitating the suspension to ensure even distribution prior to the injection.

19. The use of claim 17 or 18, further comprising warming the suspension to room temperature prior to the injection.

20. The use of any one of claims 17-19, wherein the suspension further comprises a surfactant.

21. The use of claim 20, wherein the surfactant is selected from polysorbates, sodium dodecyl sulfate, sodium lauryl sulfate, lauryl dimethyl amine oxide, polyethoxylated alcohols, polyoxyethylene sorbitan, octoxynol, Brij, pluronic, and polyoxyl castor oil.

22. The use of any one of claims 17-21, wherein the suspension further comprises phenol, mannitol, sorbitol, or sodium chloride.

23. The use of any one of claims 1-22, wherein an antibiotic solution or an atropine sulfate ointment is to be administered after the injection.

24. The use of claim 23, wherein the antibiotic solution comprises ciprofloxacin.

25. The use of any one of claims 1-24, wherein the rAAV2 variant comprises a nucleic acid encoding the sequence of SEQ ID NO: 9 and the sequence of SEQ ID NO: 10.