CLAIMS

1. An extracellular vesicle (EV) comprising an adeno-associated virus (AAV) and a scaffold protein, wherein the AAV is in the lumen of the EV, and wherein the AAV in the EV has altered properties as compared to the AAV alone.

2. The EV of claim 1, wherein

(i) the altered property comprises a better therapeutic effect than AAV alone, wherein the better therapeutic effect comprises. 3. The EV of claim 1 or 2, wherein the better therapeutic effect comprone or more of higher Infectivityinfectivity, higerhhigher activity, greater potency, faster transduction kinetics, and tolerance against immune invasion; .

4. The EV of any one of claims 1 to 3, wherein(ii) the altered propertyies of the AAV allows the AAV to be administered to a subject through two or more doses, wherein the infectivity and/or activity of the AAV is retained in subsequent doses;

(iii) both (i) and (ii).

53. An EV comprising an AAV, wherein the EV comprises a scaffold protein and at least 5 AAV, wherein the at least 5 AAV are in the lumen of the EV.

6. The EV of claim 5, comprising at least 6 AAVs, at least 7 AAVs, at least 8 AAVs, at least 9 AAVs, at least 10 AAVs, at least 11 AAVs, at least 12 AAVs, at least 13 AAVs, at least 14 AAVs, at least 15 AAVs, at least 16 AAVs, at least 17 AAVs, at least 18 AAVs, at least 19 AAVs, at least 20 AAVs, at least 201 AAVs, at least 22 AAVs, at least 23 AAVs, at least 24 AAVs, at least 25 AAVs, at least 26 AAVs, at least 27 AAVs, at least 28 AAVs, at least 29 AAVs, at least 30 AAVs, at least 35 AAVs, at least 40 AAVs, at least 45 AAVs, at least 50 AAVs, at least 60 AAVs, at least 70 AAVs, at least 80 AAVs, at least 90 AAVs, or at least 100 AAVs in the lumen of the EV.

74. The EV of claim 53, comprising at least about 5 AAVs to at least about 100 AAVs, at least about 5 AAVs to at least about 75 AAVs, at least about 5 AAVs to at least about 50 AAVs, at least about 5 AAVs to at least about 45 AAVs, at least about 5 AAVs to at least about 40 AAVs, at least about 5 AAVs to at least about 35 AAVs, at least about 5 AAVs to at least about 30 AAVs, at least

~~about 5 AAVs to at least about 25 AAVs, at least about 5 AAVs to at least about 20 AAVs, at least about 5 AAVs to at least about 15 AAVs, at least about 5 AAVs to at least about 10 AAVs, at least about 10 AAVs to at least about 100 AAVs, at least about 10 AAVs to at least about 75 AAVs, at least about 10 AAVs to at least about 50 AAVs, at least about 5 AAVs to at least about 45 AAVs, at least about 10 AAVs to at least about 40 AAVs, at least about 10 AAVs to at least about 35 AAVs, at least about 10 AAVs to at least about 30 AAVs, at least about 10 AAVs to at least about 25 AAVs, at least about 10 AAVs to at least about 20 AAVs, or at least about 10 AAVs to at least about 15 AAVs~~ in the lumen of the EV.

~~8~~5. The EV of ~~any one of claims 5 to 7~~ claim 3 or 4 comprising at least about 5 AAVs to at least about 20 AAVs.

~~9~~6. The EV of any one of claims 1 to ~~5~~8, wherein the EV comprises a bi-lipid membrane comprising a luminal surface and an external surface, wherein (i) at least one of the AAVs is not linked to the luminal surface of the EV or (ii)~~.~~

~~10. The EV of any one of claims 1 to 8, wherein the EV comprises a bi-lipid membrane comprising a luminal surface and an external surface, wherein~~ at least one of the AAVs is linked to the luminal surface of the EV.

~~11~~7. The EV of claim ~~6~~10, wherein the at least one AAV is linked to the luminal surface of the EV by a covalent bond, ~~or~~ a non-covalent bond, or both.

~~12. The EV of claim 10 or 11, wherein the at least one AAV is linked to the luminal surface of the EV by both a covalent bond and a non-covalent bond.~~

~~13~~8. The EV of any one of claims 1 to ~~7~~12, wherein the AAV is linked to the scaffold protein.

~~14~~9. The EV of any one of claims 1 to ~~8~~13, wherein the scaffold protein comprises an N terminus domain (ND) and an effector domain (ED), wherein the ND and/or the ED are associated with the luminal surface of the EV, ~~.~~

~~15. The EV of claim 14,~~ wherein the ND is associated with the luminal surface of the EV via myristoylation, and~~.~~

~~16. The EV of claim 14 or 15,~~ wherein the ED is associated with the luminal surface of the EV by an ionic interaction; and~~.~~

~~17. The EV of any one of claims 14 to 16, wherein the ED comprises (i) a basic amino acid or (ii) two or more basic amino acids in sequence, wherein the basic amino acid is selected from the group consisting of Lys, Arg, His, and any combination thereof.~~

~~18. The EV of claim 17, wherein the basic amino acid is (Lys)n, wherein n is an integer between 1 and 10.~~

~~19. The EV of any one of claims 14 to 18, wherein the ED comprises Lys (K), KK, KKK, KKKK (SEQ ID NO: 11), KKKKK (SEQ ID NO: 12), Arg (R), RR, RRR, RRRR (SEQ ID NO: 13); RRRRR (SEQ ID NO: 14), KR, RK, KKR, KRK, RKK, KRR, RRK, (K/R)(K/R)(K/R)(K/R) (SEQ ID NO: 15), (K/R)(K/R)(K/R)(K/R)(K/R) (SEQ ID NO: 16), or any combination thereof.~~

~~20. The EV of any one of claims 14 to 19, wherein the ND comprises the amino acid sequence as set forth in G:X2:X3:X4:X5:X6, wherein G represents Gly; wherein ":" represents a peptide bond, wherein each of the X2 to the X6 is independently an amino acid, and wherein the X6 comprises a basic amino acid.~~

~~21. The EV of claim 20, wherein:~~

~~i. the X2 is selected from the group consisting of Pro, Gly, Ala, and Ser;~~

~~ii. the X4 is selected from the group consisting of Pro, Gly, Ala, Ser,Val, Ile, Leu, Phe, Trp, Tyr, Gln and Met;~~

~~iii. the X5 is selected from the group consisting of Pro, Gly, Ala, and Ser;~~

~~iv. the X6 is selected from the group consisting of Lys, Arg, and His; or~~

~~v. any combination of (i) (iv).~~

~~22. The EV of any one of claims 14 to 21, wherein the ND comprises the amino acid sequence of G:X2:X3:X4:X5:X6, wherein~~

~~i. G represents Gly;~~

~~ii. ":" represents a peptide bond;~~

~~iii. the X2 is an amino acid selected from the group consisting of Pro, Gly, Ala, and Ser;~~

~~iv. the X3 is an amino acid;~~

~~v. the X4 is an amino acid selected from the group consisting of Pro, Gly, Ala, Ser,Val, Ile, Leu, Phe, Trp, Tyr, Gln and Met;~~

~~vi. the X5 is an amino acid selected from the group consisting of Pro, Gly, Ala, and Ser; and~~

~~vii. the X6 is an amino acid selected from the group consisting of Lys, Arg, and His.~~

~~23. The EV of any one of claims 18 to 22, wherein the X3 is selected from the group consisting of Asn, Gln, Ser, Thr, Asp, Glu, Lys, His, and Arg.~~

~~24. The EV of any one of claims 14 to 23, wherein the ND and the ED are joined by a linker.~~

~~25. The EV of claim 24, wherein the linker comprises a peptide bond or one or more amino acids.~~

~~26. The EV of any one of claims 14 to 25,~~ wherein the ND comprises an amino acid sequence selected from the group consisting of (i) GGKLSKK (SEQ ID NO: 17), (ii) GAKLSKK (SEQ ID NO: 18), (iii) GGKQSKK (SEQ ID NO: 19), (iv) GGKLAKK (SEQ ID NO: 20), (v) GGKLSKK (SEQ ID NO: 21), or ~~(vi) any combination thereof.~~

~~27. The EV of claim 26, wherein the ND comprises an amino acid sequence selected from the group consisting of~~ (vi) GGKLSKKK (SEQ ID NO: 22), (vii) GGKLSKKS (SEQ ID NO: 23), (viii) GAKLSKKK (SEQ ID NO: 24), (ix~~v~~) GAKLSKKS (SEQ ID NO: 25), (x~~v~~) GGKQSKKK (SEQ ID NO: 26), (~~vi~~xi) GGKQSKKS (SEQ ID NO: 27), (~~vii~~xii) GGKLAKKK (SEQ ID NO: 28), (~~viii~~xiii) GGKLAKKS (SEQ ID NO: 29), (~~ix~~xiv) GGKLSKKK (SEQ ID NO: 30), (xv) GGKLSKKS (SEQ ID NO: 31), and (xvi) any combination thereof.

~~28. The EV of any one of claims 14 to 27, wherein the ND comprises the amino acid sequence GGKLSKK (SEQ ID NO: 17).~~

~~29. The EV of any one of claims 1 to 28, wherein the scaffold protein is at least about 8, at least about 9, at least about 10, at least about 11, at least about 12, at least about 13, at least about 14, at least about 15, at least about 16, at least about 17, at least about 18, at least about 19, at least about 20, at least about 21, at least about 22, at least about 23, at least about 24, at least about 25, at least about 30, at least about 35, at least about 40, at least about 45, at least about 50, at least about 55, at least about 60, at least about 65, at least about 70, at least about 75, at least about 80, at least about 85, at least about 90, at least about 95, at least about 100, at least about 105, at least about 110, at least about 120, at least about 130, at least about 140, at least about 150, at least about 160, at least about 170, at least about 180, at least about 190, or at least about 200 amino acids in length.~~

~~30. The EV of any one of claims 1 to 29, wherein the scaffold protein comprises (i) GGKLSKKKKGYNVN (SEQ ID NO: 32), (ii) GAKLSKKKKGYNVN (SEQ ID NO: 33), (iii) GGKQSKKKKGYNVN (SEQ ID NO: 34), (iv) GGKLAKKKKGYNVN (SEQ ID NO: 35), (v) GGKLSKKKKGYSGG (SEQ ID NO: 36), (vi) GGKLSKKKKGSGGS (SEQ ID NO: 37), (vii) GGKLSKKKKSGGSG (SEQ ID NO: 38), (viii) GGKLSKKKSGGSGG (SEQ ID NO: 39), (ix) GGKLSKKSGGSGGS (SEQ ID NO: 40), (x) GGKLSKSGGSGGSV (SEQ ID NO: 41), or (xi) GAKKSKKRFSFKKS (SEQ ID NO: 42).~~

~~31. The EV of any one of claims 14 to 30, wherein the scaffold protein does not comprise Met at the N terminus.~~

~~32~~10. The EV of claim 9~~any one of claims 14 to 31~~, wherein the scaffold protein comprises a myristoylated amino acid residue at the N terminus of the scaffold protein.

~~33~~11. The EV of claim ~~32~~10, wherein the amino acid residue at the N terminus of the scaffold protein is Gly.

~~34~~12. The EV of claim 10~~32~~ or 11~~33~~, wherein the amino acid residue at the N terminus of the scaffold protein is synthetic or a glycine analog.

~~35. The EV of claim 33 or 34, wherein the amino acid residue at the N terminus of the scaffold protein is a glycine analog.~~

~~36. The EV of any one of claims 1 to 35, wherein the scaffold protein comprises an amino acid sequence having at least about 70%, at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98%, at least about 99%, or about 100% sequence identity to SEQ ID NO: 8, SEQ ID NO: 9, or SEQ ID NO: 10.~~

~~37~~13. The EV of any one of claims 9~~14~~ to 12~~36~~, wherein the EV further comprises a second scaffold protein, which comprises prostaglandin F2 receptor negative regulator (the PTGFRN protein); basigin (the BSG protein); immunoglobulin superfamily member 2 (the IGSF2 protein); immunoglobulin superfamily member 3 (the IGSF3 protein); immunoglobulin superfamily member 8 (the IGSF8 protein); integrin beta-1 (the ITGB1 protein); integrin alpha-4 (the ITGA4 protein); 4F2 cell-surface antigen heavy chain (the SLC3A2 protein); a class of ATP transporter proteins (the ATP1A1, ATP1A2, ATP1A3, ATP1A4, ATP1B3, ATP2B1, ATP2B2, ATP2B3, ATP2B4 proteins), CD13, aminopeptidase N (ANPEP), neprilysin (membrane metalloendopeptidase; MME), ectonucleotide pyrophosphatase/phosphodiesterase family member 1 (ENPP1), neuropilin-1 (NRP1), CD9, CD63, CD81, PDGFR, GPI anchor proteins, lactadherin, LAMP2, LAMP2B, a fragment thereof, and any combination thereof.

~~38~~14. The EV of any one of claims 1 to 13~~37~~, wherein the AAV comprises at least one capsid protein fused to the scaffold protein and/or the second scaffold protein.

~~39. The EV of claim 38, wherein the at least one capsid protein is selected from the group consisting of VP1, VP2, and VP3.~~

~~40~~15. The EV of claim 14~~38 or 39~~, wherein the AAV capsid protein comprises VP2.

~~41~~16. The EV of claim 14 or 15~~any one of claims 38 to 40~~, wherein the AAV comprises at least one VP2 that is not fused to the scaffold protein and/or the second scaffold protein.

~~42~~17. The EV of any one of claims 14~~38~~ to 16~~41~~, wherein the scaffold protein is fused to the N-terminus of the VP2.

~~43~~18. The EV of claim~~s~~ 16~~41~~ or 17~~42~~, wherein the number of the VP2 fused to the scaffold protein is less than the number of the at least one VP2 not fused to the scaffold protein.

~~44. The EV of claims 41 or 42, wherein the number of the VP2 fused to the scaffold protein is about 2 fold, about 3 fold, about 4 fold, about 5 fold, about 6 fold, about 7 fold, about 8 fold, about 9 fold, about 10 fold, about 11 fold, about 12 fold, about 13 fold, about 14 fold, about 15 fold, about 16 fold, about 17 fold, about 18 fold, about 19 fold, about 20 fold, about 21 fold, about 22 fold, about 23 fold, about 24 fold, about 25 fold, about 30 fold, about 35 fold, about 40 fold, about 46 fold, about 50 fold, or about 100 fold less than the number of the at least one VP2 not fused to the scaffold protein.~~

~~45~~19. The EV of any one of claims 1 to 8~~13~~, wherein the scaffold protein is a type I transmembrane protein or a type II transmembrane protein.

~~46~~20. The EV of claim 19~~45~~, wherein the a type I transmembrane protein comprises prostaglandin F2 receptor negative regulator (the PTGFRN protein); basigin (the BSG protein); immunoglobulin superfamily member 2 (the IGSF2 protein); immunoglobulin superfamily member 3 (the IGSF3 protein); immunoglobulin superfamily member 8 (the IGSF8 protein); integrin beta-1 (the ITGB1 protein); integrin alpha-4 (the ITGA4 protein); 4F2 cell-surface antigen heavy chain (the SLC3A2 protein); a class of ATP transporter proteins (the ATP1A1, ATP1A2, ATP1A3, ATP1A4, ATP1B3, ATP2B1, ATP2B2, ATP2B3, ATP2B4 proteins), CD13, aminopeptidase N (ANPEP), neprilysin (membrane metalloendopeptidase; MME), ectonucleotide pyrophosphatase/phosphodiesterase family member 1 (ENPP1), neuropilin-1 (NRP1), CD9, CD63, CD81, PDGFR, GPI anchor proteins, lactadherin, LAMP2, LAMP2B, a fragment thereof, and any combination thereof.

~~47~~21. The EV of claim 19~~45~~ or 20~~46~~, wherein the C terminus of the type I transmembrane protein or the N terminus of the type II transmembrane protein is linked to a binding partner of a chemically induced dimer.

~~48~~22. The EV of any one of claims 9~~14~~ to 13~~37~~, wherein the scaffold protein is linked to a binding partner of a chemically induced dimer.

~~49~~23. The EV of claim 21~~47~~ or 22~~48~~, wherein the binding partner of the chemically induced dimer comprises one of binding partners selected from the group; consisting of (i) FKBP and FKBP (FK1012); (ii) FKBP and CalcineurinA (CNA) (FK506); (iii) FKBP and CyP-Fas (FKCsA); (iv) FKBP and FRB (Rapamycin); (v) GyrB and GyrB (Coumermycin); (vi) GAI and GID1 (Gibberellin); (vii) Snap-tag and HaloTag (HaXS); (viii) eDHFR and HaloTag (TMP-HTag); and (ix) BCL-xL and Fab (AZ1) (ABT-737).

~~50. The EV of any one of claims 47 to 49, wherein the chemically induced dimer comprises an FRB-FKBP fusion complex.~~

~~51. The EV of claim 50, wherein the FRB is the FRB of mTOR.~~

~~52. The EV of any one of claims 47 to 51, wherein the AAV comprises at least one capsid protein fused to one of the binding partners of the chemically induced dimer, thereby forming a dimer complex when the binding partners come in contact with the chemical compound.~~

~~53. The EV of claim 52, wherein the at least one capsid protein is selected from the group consisting of VP1, VP2, and VP3.~~

~~54. The EV of claim 52 or 53, wherein the AAV capsid protein comprises VP2.~~

~~55. The EV of any one of claims 52 to 54, wherein the AAV comprises at least one VP2 that is not fused to a binding partner of the chemically induced dimer.~~

~~56. The EV of claim 55, wherein the number of the VP2 fused to a binding partner of the chemically induced dimer is less than the at least one VPs that is not fused to a binding partner of the chemically induced dimer.~~

~~57. The EV of claims 56, wherein the number of the VP2 linked to the binding partner of the chemically induced dimer is about 2 fold, about 3 fold, about 4 fold, about 5 fold, about 6 fold, about 7 fold, about 8 fold, about 9 fold, about 10 fold, about 11 fold, about 12 fold, about 13 fold, about 14 fold, about 15 fold, about 16 fold, about 17 fold, about 18 fold, about 19 fold, about 20 fold, about 21 fold, about 22 fold, about 23 fold, about 24 fold, about 25 fold, about 30 fold, about 35 fold, about 40 fold, about 46 fold, about 50 fold, or about 100 fold less than the number of the at least one VP2 not fused to the binding partner.~~

~~58. The EV of claim 52 or 53, wherein the binding partner of the chemically induced dimer is inserted within an internal loop of the AAV capsid protein.~~

~~59. The EV of claim 58, wherein the internal loop comprises the sequence GTTTQSR (SEQ ID NO: 43).~~

~~60. The EV of claim 58, wherein the internal loop comprises amino acid residues 453 to 459 of SEQ ID NO: 44.~~

~~61. The EV of claim 59 or 60, wherein at least one amino acid of the internal loop is replaced by a binding partner of the chemically induced dimer.~~

~~62. The EV of any one of claims 30 to 46, wherein the scaffold protein is linked to the binding partner of the chemically induced dimer by a linker.~~

~~63. The EV of any one of claims 38 to 44 or 52 to 62, wherein the AAV capsid protein is linked to the binding partner of the chemically induced dimer by a linker.~~

~~64. The EV of claim 62 or 63, wherein the linker comprises a covalent bond or one or more amino acids.~~

~~65. The EV of any one of claims 62 to 64, wherein the linker is a cleavable linker.~~

~~66. The EV of any one of claims 1 to 37 and 45 to 47, wherein the scaffold protein is linked to an affinity agent that specifically binds to the AAV.~~

~~67. The EV of claim 66, wherein the affinity agent is an AAV receptor, a nanobody, a camelid antibody, an IgNAR, a single-domain antibody, an antibody or an antigen-binding portion thereof, any functional fragment thereof, or any combination thereof.~~

~~68. The EV of claim 67, wherein the antigen-binding portion thereof comprises a single chain Fab.~~

~~69. The EV of any one of claims 66 to 68, wherein the affinity agent binds to one or more AAV capsid proteins.~~

~~70. The EV of claim 69, wherein the one or more AAV capsid proteins are AAV assembly activating proteins.~~

~~71. The EV of claim 70, wherein the affinity agent does not bind to an AAV capsid protein monomer.~~

~~72. The EV of any one of claims 1 to 71, wherein the AAV further comprises a genetic cassette comprising a heterologous sequence encoding a gene of interest.~~

~~73. The EV of claim 72, wherein the genetic cassette encodes a protein selected from the group consisting of a secreted protein, a receptor, a structural protein, a signaling protein, a sensory protein, a regulatory protein, a transport protein, a storage protein, a defense protein, a motor protein, a clotting factor, a growth factor, an antioxidant, a cytokine, a chemokine, an enzyme, a tumor suppressor gene, a DNA repair protein, a structural protein, a low-density lipoprotein receptor, an alpha glucosidase, a cystic fibrosis transmembrane conductance regulator, or any combination thereof.~~

~~74. The EV of claim 72 or 73, wherein the genetic cassette encodes a factor VIII protein or a factor IX protein.~~

~~75. The EV of claim 74, wherein the factor VIII protein is a wild-type factor VIII, a B-domain deleted factor VIII, a factor VIII fusion protein, or any combination thereof.~~

~~76. The EV of claim 72 or 73, wherein the gene of interest encodes a Rab proteins geranylgeranyltransferase component A 1 (REP1).~~

~~77. The EV of claim 76, wherein the REP1 comprises an amino acid sequence at least about 70%, at least about 75%, at least about at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98%, at least about 99%, or about 100% identical to SEQ ID NO: 45.~~

~~78. The EV of any one of claims 1 to 77, wherein the AAV is selected from the group consisting of AAV type 1, AAV type 2, AAV type 3A, AAV type 3B, AAV type 4, AAV type 5, AAV type 6, AAV type 7, AAV type 8, AAV type 9, AAV type 10, AAV type 11, AAV type 12,~~

~~AAV type 13, snake AAV, avian AAV, bovine AAV, canine AAV, equine AAV, ovine AAV, goat AAV, shrimp AAV, a synthetic AAV, an any combination thereof.~~

~~79~~24. An AAV in the EV of any one of claims 1 to 23~~78~~.

~~80. An AAV comprising VP2 linked to a scaffold protein comprising the amino acid sequence as set forth in G:X2:X3:X4:X5:X6, wherein G represents Gly; wherein ":" represents a peptide bond, wherein each of the X2 to the X6 is independently an amino acid, and wherein the X6 comprises a basic amino acid.~~

~~81. The AAV of claim 80, wherein the scaffold protein is the scaffold protein or the second scaffold protein set forth in any one of claims 14 to 37.~~

~~82. An AAV comprising VP2 linked to a binding partner of a chemically induced dimer.~~

~~83. The AAV of claim 82, wherein the binding partner of the chemically induced dimer comprises any one of the binding partners set forth in any one of claims 49 to 51.~~

~~84. An AAV comprising one or more capsid proteins specifically bound to an affinity agent.~~

~~85. The AAV of claim 84, wherein the affinity agent is set forth in any one of claims 67 to 71.~~

~~86~~25. An extracellular vesicle (EV) comprising (i) an adeno-associated virus (AAV) and (ii) a scaffold protein, wherein the AAV is associated with the scaffold protein on the external surface of the EV.

~~87~~26. The EV of claim 25~~86~~, wherein the scaffold protein comprises an extracellular domain, and wherein the AAV is associated with the extracellular domain of the scaffold protein.

~~88. The EV of claim 86 or 87, wherein the scaffold protein further comprises a transmembrane region, wherein the transmembrane region is anchored to the membrane of the EV.~~

~~89. The EV of any one of claims 86 to 88, wherein the scaffold protein further comprises an intracellular domain.~~

9027. The EV of claim 25 or 26any one of claims 86 to 89, wherein the scaffold protein comprises a heterologous polypeptide, wherein the heterologous polypeptide is fused to an extracellular domain of the scaffold protein, and wherein the heterologous polypeptide associates with the AAV.

9128. The EV of any one of claims 2586 to 2790, wherein the scaffold protein is a type I transmembrane protein or a type II transmembrane protein.

9229. The EV of claim 2790 or 2891, wherein the heterologous polypeptide is fused to the N-terminus or the C terminus of the extracellular domain of the scaffold protein.

9330. The EV of any one of claims 2790 to 2992, wherein the heterologous polypeptide comprises a receptor, a ligand, an antigen-binding moiety, a substrate, a fragment thereof, or a combination thereof; and wherein the heterologous polypeptide specifically interacts with one or more proteins on the surface of the AAV.

9431. The EV of claim 3093, wherein the heterologous polypeptide comprises an antigen-binding moiety selected from the group consisting of an antigen-binding fragment of an antibody, a camelid antibody or an antigen-binding fragment thereof, a single-chain FAB, a nanobody, a shark IgNAR, and a combination thereof.

95. The EV of claim 93 or 94, wherein the antigen-binding moiety comprises a nanobody.

9632. The EV of claim 30 or 31any one of claims 93 to 95, wherein the antigen binding moiety specifically binds the one or more proteins on the surface of the AAV.97. The EV of any one of claims 93 to 96, wherein the one or more proteins on the surface of the AAV comprise (i) a capsid protein selected from the group consisting of VP1, VP2, VP3, and any combination thereof; or (ii).

98. The EV of any one of claims 93 to 97, wherein the one or more proteins on the surface of the AAV is a non-AAV sequence fused to a capsid protein of the AAV.

99. The EV of claim 98, wherein the capsid protein is selected from VP1, VP2, VP3, and any combination thereof.

~~100~~33. The EV of claim 32~~99~~, wherein the non-AAV sequence is fused to VP2.

~~101~~34. The EV of claim 32~~99~~ or ~~100~~33, wherein the non-AAV sequence is fused to the N-terminus ~~of VP2~~the capsid protein ~~.102. The EV of claim 99 or 101, wherein the non-AAV sequence is fused~~ or to an internal surface-exposed loop of ~~VP2~~the capsid protein.

~~103. The EV of claim 99, wherein the non-AAV sequence is fused to VP3.~~

~~104. The EV of claim 99 or 103, wherein the non-AAV sequence is fused to the N-terminus of VP3.~~

~~105. The EV of claim 99 or 103, wherein the non-AAV sequence is fused to an internal surface-exposed loop of VP3.~~

~~106. The EV of claim 99, wherein the non-AAV sequence is fused to VP1.~~

~~107. The EV of claim 106, wherein the non-AAV sequence is fused to an internal surface-exposed loop of VP1.~~

~~108~~35. The EV of any one of claims 25~~86~~ to 30~~93~~, wherein:

(a) (i) the scaffold protein is fused to a heterologous polypeptide comprising an Fc receptor; and

(ii) the AAV comprises at least one capsid protein fused to an Fc region of an immunoglobulin constant region (Fc);~~.~~

~~109. The EV of claim 108, wherein the Fc receptor is an Fc gamma receptor selected from Fc gamma receptor I (FcγR1), FcγRIIA, FcγIIB, FcγIIIA, and FcγIIIB; and wherein the Fc is an Fc of an IgG.~~

~~110. The EV of claim 108 or 109, wherein the Fc receptor is an FcγR1 and the Fc is an Fc of an IgG.~~

~~111. The EV of claim 108, wherein the Fc receptor is an Fc alpha receptor I (FcαR1), and wherein the Fc is an Fc of an IgA.~~

~~112. The EV of claim 108, wherein the Fc receptor is an Fc epsilon receptor selected from Fc epsilon receptor I (FcεRI) and FcεRII, and wherein the Fc is an Fc of an IgE.~~

~~113. The EV of any one of claims 86 to 93, wherein:~~

(b) (i) the scaffold protein is fused to a heterologous polypeptide comprising a nanobody; and

(ii) the AAV comprises at least one capsid protein fused to an Fc region of an immunoglobulin constant region (Fc);~~.~~

(c) the scaffold protein is fused to a an antigen-binding moiety, wherein the antigen-binding moiety specifically binds an antigen on the surface of an AAV; or

(d) the scaffold protein is fused to a is fused to a heterologous polypeptide comprising an AAV receptor.

~~114. The EV of claim 113, wherein the nanobody specifically binds to the Fc fused to the capsid protein.~~

~~115. The EV of any one of claims 108 to 114, wherein the at least one capsid protein is selected from the group consisting of VP1, VP2, and VP3.~~

~~116. The EV of any one of claims 108 to 115, wherein the AAV comprises at least one VP2 fused to an Fc.~~

~~117. The EV of claim 116, wherein the AAV comprises at least one VP2 that is not fused to an Fc.~~

~~118. The EV of any one of claims 108 to 117, wherein the Fc is fused to the N-terminus of the at least one VP2.~~

~~119. The EV of any one of claims 108 to 117, wherein the Fc is fused to an internal surface-exposed loop of the at least one VP2.~~

~~120. The EV of any one of claims 108 to 119, wherein the AAV comprises at least one VP3 fused to an Fc.~~

~~121. The EV of claim 120, wherein the AAV comprises at least one VP3 that is not fused to the Fc.~~

~~122. The EV of any one of claims 108 to 121, wherein the Fc is fused to the N-terminus of the at least one VP3.~~

~~123. The EV of any one of claims 108 to 121, wherein the Fc is fused to an internal surface-exposed loop of the at least one VP3.~~

~~124. The EV of any one of claims 108 to 123, wherein the AAV comprises at least one VP1 fused to an Fc.~~

~~125. The EV of any one of claims 108 to 123, wherein the AAV comprises at least one VP1 that is not fused to an Fc.~~

~~126. The EV of claim 124, wherein the Fc is fused to a surface-exposed loop of VP1.~~

~~127~~36. The EV of claim 34~~any one of claims 102, 105, 107, 119, 123, and 126~~, wherein the surface-exposed loop comprises the sequence GTTTQSR (SEQ ID NO: 43) or ~~.128. The EV of any one of claims 102, 105, 107, 119, 123, and 126, wherein the surface-exposed loop comprises~~ amino acid residues 453 to 459 of VP1.

~~129. The EV of any one of claims 102, 105, 107, 119, 123, and 126 to 128, wherein the at least one amino acid of the surface-exposed loop is replaced by the Fc.~~

~~130. The EV of any one of claims 102, 105, 107, 119, 123, and 126 to 129, wherein the surface-exposed loop is replaced by the Fc.~~

~~131. The EV of any one of claims 86 to 96, wherein the scaffold protein is fused to an antigen-binding moiety, wherein the antigen-binding moiety specifically binds an antigen on the surface of an AAV.~~

~~132. The EV of any one of claims 86 to 93, wherein the scaffold protein is fused to a heterologous polypeptide comprising an AAV receptor.~~

~~133~~37. The EV of any one of claims 25~~86~~ to 36~~132~~, wherein the AAV further comprises a nucleotide sequence comprising a gene of interest.

~~134~~38. The EV of claim 37~~133~~, wherein the gene of interest encodes a protein selected from the group consisting of a secreted protein, a receptor, a structural protein, a signaling protein, a sensory protein, a regulatory protein, a transport protein, a storage protein, a defense protein, a motor protein, a clotting factor, a growth factor, an antioxidant, a cytokine, a chemokine, an enzyme, a tumor suppressor gene, a DNA repair protein, a structural protein, a low-density lipoprotein receptor, an alpha glucosidase, a cystic fibrosis transmembrane conductance regulator, or any combination thereof.

~~135~~39. The EV of claim 37~~133~~ or 38~~134~~, wherein the gene of interest encodes a factor VIII protein, ~~or~~ a Factor IX protein~~.~~, or a ~~136. The EV of claim 135, wherein the factor VIII protein is a wild-type factor VIII, a B-domain deleted factor VIII, a factor VIII fusion protein, or any combination thereof.~~

~~137. 52. The EV of claim 133 or 134, wherein the gene of interest encodes a~~ Rab proteins geranylgeranyltransferase component A 1 (REP1)

~~138. 53. The EV of claim 137, wherein the REP1 comprises an amino acid sequence at least about 70%, at least about 75%, at least about at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98%, at least about 99%, or about 100% identical to SEQ ID NO: 45.~~

~~139~~40. The EV of any one of claims ~~86~~ 25 to 39~~138~~, wherein the AAV is selected from the group consisting of AAV type 1, AAV type 2, AAV type 3A, AAV type 3B, AAV type 4, AAV type 5, AAV type 6, AAV type 7, AAV type 8, AAV type 9, AAV type 10, AAV type 11, AAV type 12, AAV type 13, snake AAV, avian AAV, bovine AAV, canine AAV, equine AAV, ovine AAV, goat AAV, shrimp AAV, a synthetic AAV, an any combination thereof.

~~140~~41. The EV of any one of claims ~~86~~25 to 40~~139~~, wherein the scaffold protein is selected from the group consisting of prostaglandin F2 receptor negative regulator (the PTGFRN protein); basigin (the BSG protein); immunoglobulin superfamily member 2 (the IGSF2 protein); immunoglobulin superfamily member 3 (the IGSF3 protein); immunoglobulin superfamily member 8 (the IGSF8 protein); integrin beta-1 (the ITGB1 protein); integrin alpha-4 (the ITGA4 protein); 4F2 cell-surface antigen heavy chain (the SLC3A2 protein); a class of ATP transporter proteins (the ATP1A1, ATP1A2, ATP1A3, ATP1A4, ATP1B3, ATP2B1, ATP2B2, ATP2B3, ATP2B4 proteins), CD13, aminopeptidase N (ANPEP), neprilysin (membrane metalloendopeptidase; MME), ectonucleotide pyrophosphatase/phosphodiesterase family member 1 (ENPP1), neuropilin-1 (NRP1), CD9, CD63, CD81, PDGFR, GPI anchor proteins, lactadherin, LAMP2, LAMP2B, a fragment thereof, and any combination thereof.

~~141~~42. The EV of any one of claims ~~86~~ 25 to 41~~140~~, wherein the scaffold protein is PTGFRN.

~~142. The EV of claim 87, wherein the scaffold protein comprises an N terminus domain, an effector domain, and a transmembrane domain, wherein the ND is myristoylated, and wherein the N-terminus domain (ND) and/or the effector domain (ED) are associated with the luminal surface of the EV.~~

~~143. The EV of claim 142, wherein the ED is associated with the luminal surface of the EV by an ionic interaction.~~

~~144. The EV of claim 142 or 143, wherein the ED comprises (i) a basic amino acid or (ii) two or more basic amino acids next to each other in a sequence, wherein the basic amino acid is selected from the group consisting of Lys, Arg, His, and any combination thereof.~~

~~145. The EV of claim 144, wherein the basic amino acid is (Lys)n, wherein n is an integer between 1 and 10.~~

~~146. The EV of any one of claims 142 to 145, wherein the ED comprises Lys (K), KK, KKK, KKKK (SEQ ID NO: 11), KKKKK (SEQ ID NO: 12), RR, RRR, RRRR (SEQ ID NO: 13); RRRRR (SEQ ID NO: 14), KR, RK, KKR, KRK, RKK, KRR, RRK, (K/R)(K/R)(K/R)(K/R) (SEQ ID NO: 15), (K/R)(K/R)(K/R)(K/R)(K/R) (SEQ ID NO: 16), or any combination thereof.~~

~~147. The EV of any one of claims 142 to 146, wherein the ND comprises the amino acid sequence as set forth in G:X2:X3:X4:X5:X6, wherein G represents Gly; wherein ":" represents a peptide bond, wherein each of the X2 to the X6 is an amino acid, and wherein the X6 comprises a basic amino acid.~~

~~148. The EV of claim 147, wherein:~~

~~(i) the X6 is selected from the group consisting of Lys, Arg, and His;~~

~~(ii) the X5 is selected from the group consisting of Pro, Gly, Ala, and Ser;~~

~~(iii) the X2 is selected from the group consisting of Pro, Gly, Ala, and Ser;~~

~~(iv) the X4 is selected from the group consisting of Pro, Gly, Ala, Ser ,Val, Ile, Leu, Phe, Trp, Tyr, Gln and Met; or~~

~~(v) any combination of (i)-(iv).~~

~~149. The EV of any one of claims 142 to 148, wherein the ND of the Scaffold protein comprises the amino acid sequence of G:X2:X3:X4:X5:X6, wherein~~

~~(i) G represents Gly;~~

~~(ii) ":" represents a peptide bond;~~

~~(iii) the X2 is an amino acid selected from the group consisting of Pro, Gly, Ala, and Ser;~~

~~(iv) the X3 is an amino acid;~~

~~(v) the X4 is an amino acid selected from the group consisting of Pro, Gly, Ala, Ser ,Val, Ile, Leu, Phe, Trp, Tyr, Gln and Met;~~

~~(vi) the X5 is an amino acid selected from the group consisting of Pro, Gly, Ala, and Ser; and~~

~~(vii) the X6 is an amino acid selected from the group consisting of Lys, Arg, and His.~~

~~150. The EV of any one of claims 147 to 149, wherein the X3 is selected from the group consisting of Asn, Gln, Ser, Thr, Asp, Glu, Lys, His, and Arg.~~

~~151. The EV of any one of claims 142 to 150, wherein the ND and the ED are joined by a linker.~~

~~152. The EV of claim 151, wherein the linker comprises a peptide bond or one or more amino acids.~~

~~153. The EV of any one of claims 142 to 152, wherein the scaffold protein comprises an amino acid sequence selected from the group consisting of (i) GGKLSKK (SEQ ID NO: 17), (ii) GAKLSKK (SEQ ID NO: 18), (iii) GGKQSKK (SEQ ID NO: 19), (iv) GGKLAKK (SEQ ID NO: 20), (v) GGKLSKK (SEQ ID NO: 21), or (vi) any combination thereof.~~

~~154. The EV of claim 153, wherein the scaffold protein comprises an amino acid sequence selected from the group consisting of (i) GGKLSKKK (SEQ ID NO: 22), (ii) GGKLSKKS (SEQ ID NO: 23), (iii) GAKLSKKK (SEQ ID NO: 24), (iv) GAKLSKKS (SEQ ID NO: 25), (v) GGKQSKKK (SEQ ID NO: 26), (vi) GGKQSKKS (SEQ ID NO: 27), (vii) GGKLAKKK (SEQ ID NO: 28), (viii) GGKLAKKS (SEQ ID NO: 29), (ix) GGKLSKKK (SEQ ID NO: 30), (x) GGKLSKKS (SEQ ID NO: 31), and (xi) any combination thereof.~~

~~155. The EV of any one of claims 142 to 154, wherein the C-terminus of the scaffold protein and/or the second scaffold protein is linked to a capsid protein of the AAV.~~

~~1564~~3. The EV of any one of claims 1 to ~~78~~23 and 25~~86~~ to 42~~155~~, which is an exosome.

~~1574~~4. An adeno-associated virus (AAV) comprising a capsid, wherein the capsid comprises at least one capsid protein selected from the group consisting of VP1, VP2, and VP3; wherein the at least one capsid protein is linked to a scaffold protein.

~~158. The AAV of claim 157, wherein the scaffold protein is selected from the group consisting of prostaglandin F2 receptor negative regulator (the PTGFRN protein); basigin (the BSG protein); immunoglobulin superfamily member 2 (the IGSF2 protein); immunoglobulin superfamily member 3 (the IGSF3 protein); immunoglobulin superfamily member 8 (the IGSF8 protein); integrin beta-1 (the ITGB1 protein); integrin alpha-4 (the ITGA4 protein); 4F2 cell-~~

surface antigen heavy chain (the SLC3A2 protein); a class of ATP transporter proteins (the ATP1A1, ATP1A2, ATP1A3, ATP1A4, ATP1B3, ATP2B1, ATP2B2, ATP2B3, ATP2B4 proteins), CD13, aminopeptidase N (ANPEP), neprilysin (membrane metalloendopeptidase; MME), ectonucleotide pyrophosphatase/phosphodiesterase family member 1 (ENPP1), neuropilin-1 (NRP1), CD9, CD63, CD81, PDGFR, GPI anchor proteins, lactadherin, LAMP2, LAMP2B, a fragment thereof, and any combination thereof.

159. The AAV of claim 157, wherein the scaffold protein comprises an N terminus domain, an effector domain, and a transmembrane domain, wherein the ND is myristoylated, and wherein the N-terminus domain (ND) and/or the effector domain (ED) are associated with the luminal surface of the EV.

160. The AAV of claim 159, wherein the ED is associated with the luminal surface of the EV by an ionic interaction.

161. The AAV of claim 159 or 160, wherein the ED comprises (i) a basic amino acid or (ii) two or more basic amino acids next to each other in a sequence, wherein the basic amino acid is selected from the group consisting of Lys, Asp, His, and any combination thereof.

162. The AAV of claim 161, wherein the basic amino acid is (Lys)n, wherein n is an integer between 1 and 10.

163. The AAV of any one of claims 159 to 162, wherein the ED comprises Lys (K), KK, KKK, KKKK (SEQ ID NO: 11), KKKKK (SEQ ID NO: 12), Arg (R), RR, RRR, RRRR (SEQ ID NO: 13); RRRRR (SEQ ID NO: 14), KR, RK, KKR, KRK, RKK, KRR, RRK, (K/R)(K/R)(K/R)(K/R) (SEQ ID NO: 15), (K/R)(K/R)(K/R)(K/R)(K/R) (SEQ ID NO: 16), or any combination thereof.

164. The AAV of any one of claims 159 to 163, wherein the ND comprises the amino acid sequence as set forth in G:X2:X3:X4:X5:X6, wherein G represents Gly; wherein ":" represents a peptide bond, wherein each of the X2 to the X6 is an amino acid, and wherein the X6 comprises a basic amino acid.

165. The AAV of claim 164, wherein:

(i) the X6 is selected from the group consisting of Lys, Asp, and His;

(ii) the X5 is selected from the group consisting of Pro, Gly, Ala, and Ser;

(iii) the X2 is selected from the group consisting of Pro, Gly, Ala, and Ser;

(iv) the X4 is selected from the group consisting of Pro, Gly, Ala, Ser ,Val, Ile, Leu, Phe, Trp, Tyr, Gln and Met; or

(v) any combination of (i) (iv).

166. The AAV of any one of claims 160 to 165, wherein the ND of the Scaffold protein comprises the amino acid sequence of G:X2:X3:X4:X5:X6, wherein

(i) G represents Gly;

(ii) ":" represents a peptide bond;

(iii) the X2 is an amino acid selected from the group consisting of Pro, Gly, Ala, and Ser;

(iv) the X3 is an amino acid;

(v) the X4 is an amino acid selected from the group consisting of Pro, Gly, Ala, Ser ,Val, Ile, Leu, Phe, Trp, Tyr, Gln, and Met;

(vi) the X5 is an amino acid selected from the group consisting of Pro, Gly, Ala, and Ser; and

(vii) the X6 is an amino acid selected from the group consisting of Lys, Arg, and His.

167. The AAV of any one of claims 164 to 166, wherein the X3 is selected from the group consisting of Asn, Gln, Ser, Thr, Asp, Glu, Lys, His, and Arg.

168. The AAV of any one of claims 159 to 167, wherein the ND and the ED are joined by a linker.

~~169. The AAV of claim 168, wherein the linker comprises a peptide bond or one or more amino acids.~~

~~170. The AAV of any one of claims 157 to 169, wherein the scaffold protein comprises an amino acid sequence selected from the group consisting of (i) GGKLSKK (SEQ ID NO: 17), (ii) GAKLSKK (SEQ ID NO: 18), (iii) GGKQSKK (SEQ ID NO: 19), (iv) GGKLAKK (SEQ ID NO: 20), (v) GGKLSKK (SEQ ID NO: 21), or (vi) any combination thereof.~~

~~171. The AAV of claim 170, wherein the scaffold protein comprises an amino acid sequence selected from the group consisting of (i) GGKLSKKK (SEQ ID NO: 22), (ii) GGKLSKKS (SEQ ID NO: 23), (iii) GAKLSKKK (SEQ ID NO: 24), (iv) GAKLSKKS (SEQ ID NO: 25), (v) GGKQSKKK (SEQ ID NO: 26), (vi) GGKQSKKS (SEQ ID NO: 27), (vii) GGKLAKKK (SEQ ID NO: 28), (viii) GGKLAKKS (SEQ ID NO: 29), (ix) GGKLSKKK (SEQ ID NO: 30), (x) GGKLSKKS (SEQ ID NO: 31), and (xi) any combination thereof.~~

~~172. The AAV of any one of claims 157 to 171, which is associated with an external surface of an extracellular vesicle (EV).~~

~~173. The AAV of any one of claims 157 to 172, which is associated with an external surface of an EV, wherein the scaffold protein or the second scaffold protein is linked to the EV.~~

~~174. The EV of claim 66, wherein the scaffold protein is linked to an affinity agent that specifically binds to the AAV by a cleavable linker.~~

~~175~~45. A pharmaceutical composition comprising the EV of any one of claims 1 to 23~~78~~, 25~~86~~ to 43~~156 and 174~~ or the AAV of claim 24 or 44 ~~any one of claims 79 to 85 and 157 to 173~~ and a pharmaceutically acceptable carrier.

~~176~~46. A cell that produces the isolated EV of any one of claims 1 to 23~~78~~, 25~~86~~ to 43~~156 and 174~~ or the AAV of claim 24 or 44~~any one of claims 79 to 85 and 157 to 173~~.

~~177. A cell comprising a first nucleotide sequence encoding an AAV protein linked to the scaffold protein set forth in any one of claims 1 to 78 86 to 156, and 174.~~

~~178. The cell of claim 88, further comprising a second nucleotide sequence comprising the gene of interest set forth in any one of claims 72 to 77 and 133 to 156.~~

~~179. A cell comprising a first nucleotide encoding a AAV protein linked to a binding partner of the chemically induced dimer set forth in any one of claims 47 to 67.~~

~~180. The cell of claim 179, further comprising a second nucleotide sequence encoding the corresponding binding partner of the chemically induced dimer of claim 90, which is linked to the scaffold protein set forth in any one of claims 1 to 47.~~

~~181. The cell of claim 180, further comprising a third nucleotide sequence comprising the gene of interest set forth in any one of claims 72 to 77.~~

~~182. A cell comprising a first nucleotide encoding an affinity agent set forth in any one of claims 66 to 71 linked to the scaffold protein set forth in any one of claims 1 to 47.~~

~~183. The cell of claim 182, further comprising a second nucleotide sequence comprising the gene of interest set forth in any one of claims 72 to 77.~~

~~1844~~47. A kit comprising (i) the isolated EV of any one of claims 1 to 43~~79, 86 to 156, and 174~~ or the AAV of claim 24 or 44 ~~any one of claims 79 to 85 and 157 to 173~~ and (ii) instructions for use.

~~185. A method of making EVs comprising culturing the cell of any one of claims 179 to 183 under a suitable condition and obtaining the EVs.~~

~~1864~~8. Use of ~~A method of preventing or treating a disease in a subject in need thereof, comprising administering to the subject~~ the EV of any one of claims 1 to 23~~78~~, 25~~86~~ to 43 ~~156, and 174~~ or the AAV of claim 24 or 44 ~~any one of claims 79 to 85 or 157 to 173~~ or the pharmaceutical composition of claim 45~~176~~ in the manufacture of a medicament for the prevention or treatment of a disease in a subject in need thereof.

~~1874~~9. The ~~method~~ use of claim ~~1864~~8, wherein the disease is selected from a cancer, a hemophilia, diabetes, a growth factor deficiency, an eye disease, a Pompe disease, a lysosomal storage disorder, mucovicidosis, cystic fibrosis, Duchenne and Becker muscular dystrophy, transthyretin amyloidosis, hemophilia A, hemophilia B, adenosine-deaminase deficiency, Leber's

congenital amaurosis, X-linked adrenoleukodystrophy, metachromatic leukodystrophy, OTC deficiency, glycogen storage disease 1A, Criggler-Najjar syndrome, primary hyperoxaluria type 1, acute intermittent porphyria, phenylketonuria, familial hypercholesterolemia, mucopolysaccharidosis type VI, α1 antitrypsin deficiency, and a hypercholesterolemia.

~~188. A method of delivering an AAV to a subject, comprising administering to the subject the EV of any one of claims 1 to 78, 86 to 156, and 174.~~

~~189~~50. The ~~method~~ use of claim 48 or 49~~any one of claims 186 to 188~~, wherein the EV is administered parenteral~~ly~~, oral~~ly~~, intravenous~~ly~~, intramuscular~~ly~~, intra-tumor~~ally~~, intranasal~~ly~~, subcutaneous~~ly~~, ~~or~~ intraperitoneal~~ly~~, or intraocularly.

~~190. The method of any one of claims 186 to 188, wherein the EV administration is intraocular administration.~~

~~191. The method of claim 190, wherein the intraocular administration is intravitreal administration, intracameral administration, subconjunctival administration, subretinal administration, subscleral administration, intrachoroidal administration, and any combination thereof.~~

~~192. The method of claims 190 or 191, wherein the intraocular administration comprises the injection of the EV.~~

~~193. The method of any one of claims 190 to 192, wherein the intraocular administration is intravitreal injection.~~

~~194. The method of any one of claims 190 to 193, wherein the intraocular administration comprises the implantation of a delivery device comprising the composition.~~

~~195. The method of claim 194, wherein the delivery device is an intraocular delivery device.~~

~~196. The method of claim 195, wherein the intraocular delivery device is an intravitreal implant or a scleral plug.~~

~~197. The method of any one of claims 194 to 196, wherein the delivery device is a sustained release delivery device.~~

~~198. The method of any one of claim 194 to 197, wherein the delivery device is biodegradable.~~

~~199. The method of any one of claims 190 to 198, wherein the intraocular administration of the EV is to treat a disease selected from the group consisting of selected from the group consisting of macular degeneration, cataract, diabetic retinopathy, glaucoma, amblyopia, strabismus, retinopathy, or any combination thereof.~~

~~200~~51. The use ~~method~~ of any one of claims 48~~186~~ to 50~~199~~, wherein the subject is to be further administered ~~comprising administering~~ an additional therapeutic agent.

~~201. An extracellular vesicle (EV) comprising an adeno-associated virus (AAV) and a scaffold protein, wherein the AAV is associated with the exosome, and wherein the AAV has altered properties as compared to the AAV alone.~~

~~202. The EV of claim 201, wherein the AAV is associated with the luminal surface of the EV.~~

~~203. The EV of claim 201, wherein the AAV is associated with the exterior surface of the EV.~~

~~204. The EV of any one of claims 201 to 203, wherein the EV is an EV of anyone of claims 1 to 78, 86 to 156, and 174.~~