WHAT IS CLAIMED IS:

1. A method for the prevention or treatment of a complement-associated eye condition, comprising administering to a subject in need a prophylactically or therapeutically effective amount of a complement inhibitor.

2. The method of claim 1 wherein said complement inhibitor is a selective inhibitor of the alternative complement pathway.

3. The method of claim 2 wherein said complement inhibitor is CRIg polypeptide or an agonist thereof.

4. The method of claim 3 wherein the CRIg polypeptide is selected from the group consisting of CRIg polypeptides of SEQ ID NO: 2, 4, 6, 8, and the extracellular domains (ECDs) of said polypeptides.

5. The method of claim 4 wherein said CRIg polypeptide is the ECD of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8.

6. The method of claim 5 wherein said CRIg polypeptide is the ECD of a CRIg polypeptide of SEQ ID NO: 4 or 6.

7. The method of claim 3 wherein the CRIg polypeptide is fused to an immunoglobulin sequence.

8. The method of claim 7 wherein the immunoglobulin sequence is an immunoglobulin constant region requence.

9. The method of claim 8 wherein the immunoglobulin constant region sequence is that of an immunoglobulin heavy chain.

10. The method of claim 9 wherein the immunoglobulin heavy chain constant region sequence is fused to an extracellular region of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8 to produce a CRIg-Ig fusion protein.

11. The method of claim 10 wherein said immunoglobulin constant region sequence is that of an IgG.

12. The method of claim 11 wherein said IgG is IgG-1 or IgG-3.

13. The method of claim 12 wherein the IgG-1 heavy chain constant region sequence comprises at least a hinge, CH2 and CH3 region.

14. The method of claim 12 wherein the IgG-1 heavy chain constant region sequence comprises a hinge, CH1, CH2 and CH3 region.

15. The method of claim 10 wherein the CRIg-Ig fusion protein comprises a linker between the CRIg and the Ig sequences.

16. The method of claim 10 wherein the CRIg-Ig fusion protein is encoded by a nucleic acid selected from the group consisting of SEQ ID NOS:.20, 21, 25, 26, 27, and 28.

17. The method of claim 1 wherein the complement-associated eye condition is selected from the group consisting of age-related macular degeneration (AMD), choroidal neovascularization (CNV), uveitis, diabetic and other ischemia-related retinopathies, endophthalmitis, diabetic macular edema, pathological myopia, von Hippel-Lindau disease, histoplasmosis of the eye, Central Retinal Vein Occlusion (CRVO), corneal neovascularization, and retinal neovascularization.

18. The method of claim 17 wherein the complement-associated eye disease is age-related macular degeneration (AMD) or choroidal neovascularization (CNV).

19. The method of claim 18 wherein said method comprises the prevention of CNV.

20. The method of claim 18 wherein said method comprises the prevention of the progression of AMD.

21. The method of claim 20 wherein said method comprises the prevention of the progression of AMD into CNV.

22. A method for the prevention of the development or progression of age-related macular degeneration (AMD), comprising administering to subject at risk of developing or diagnosed with AMD in at least one eye, an effective amount of a CRIg polypeptide or an agonist thereof.

23. The method of claim 22 wherein the CRIg polypeptide is the extracellular domain of a polypeptide of SEQ ID NO: 2, 4, 6, or 8.

24. The method of claim 23 wherein the CRIg polypeptide is the extracellular domain of a polypeptide of SEQ ID NO: 4 or 6.

25. The method of claim 22 wherein the agonist is a fusion polypeptide comprising a CRIg polypeptide sequence fused to an immunoglobulin sequence.

26. The method of claim 25 wherein the fusion polypeptide comprises the extracellular domain of a polypeptide of SEQ ID NO: 4 or 6 fused to an immunoglobulin heavy chain constant region sequence

27. The method of claim 26 wherein the fusion polypeptide is selected from the group consisting of fusion polypeptides encoded by the nucleotide sequence of SEQ ID NO: 20, 21, 25, 26, 27, and 28.

28. The method of any one of claims 22-27, wherein the subject is a human.

29. The method of claim 28 wherein the human subject has been diagnosed with AMD in at least one eye.

30. The method of claim 29 wherein said AMD is category 3 or category 4 dry AMD.

31. The method of claim 30 wherein said subject has been identified to be at risk to develop CNV.

32. The method of claim 31 wherein said subject is genetically at risk of developing CNV.

33. The method of claim 30 wherein said human subject has been diagnosed with AMD in both eyes.

34. The method of claim 33 wherein said human subject has category 3 or category 4 AMD in both eyes.

35. The method of claim 28 wherein said administration slows down the progression of AMD.

36. The method of claim 28 wherein said administration delays the progression of AMD into CNV.

37. The method of claim 28 wherein said administration prevents the progression of AMD into CNV.

38. The method of claim 29 wherein the human subject has been diagnosed with AMD in one eye only.

39. The method of claim 38 wherein said administration delays the development of AMD in the other eye.

40. The method of claim 38 wherein said administration prevents the development of AMD in the other eye.

41. The method of claim 28 wherein said administration is performed by intravitreal injection.

42. The method of claim 28 further comprising the administration of an additional agent for the prevention or treatment of AMD or CNV.

43. The method of claim 42 wherein said additional agent is an anti-VEGF-A antibody.

44. A method for the treatment of dry age-related macular degeneration (AMD), comprising administering to a subject in need a prophylactically or therapeutically effective amount of a CRIg polypeptide or an agonist thereof.

45. The method of claim 44 wherein the CRIg polypeptide is selected from the group consisting of CRIg polypeptides of SEQ ID NO: 2, 4, 6, 8, and the extracellular domains (ECDs) of said polypeptides

46. The method of claim 45 wherein said CRIg polypeptide is the extracellular region of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8.

47. The method of claim 46 wherein said CRIg polypeptide is the extracellular region of a CRIg polypeptide of SEQ ID NO: 4 or 6.

48. The method of claim 45 wherein the CRIg polypeptide is fused to an immunoglobulin sequence.

49. The method of claim 48 wherein the immunoglobulin sequence is an immunoglobulin constant region requence.

50. The method of claim 49 wherein the immunoglobulin constant domain sequence is that of an immunoglobulin heavy chain.

51. The method of claim 50 wherein said immunoglobulin heavy chain constant region sequence is fused to an extracellular domain (ECD) of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8.

52. The method of claim 51 wherein said immunoglobulin constant region sequence is that of an IgG.

53. The method of claim 52 wherein said IgG is IgG-1 or IgG-3.

54. The method of claim 53 wherein the IgG-1 heavy chain constant region sequence comprises at least a hinge, CH2 and CH3 region.

55. The method of claim 53 wherein the IgG-1 heavy chain constant region sequence comprises a hinge, CH1, CH2 and CH3 region.

56. A method for the prevention or treatment of a complement-associated diseases or condition, comprising treating a subject in need of such treatment with a prophylactially or therapeutically effective amount of a CRIg polypeptide or an agonist thereof.

57. The method of claim 56 wherein said CRIg polypeptide is selected from the group consisting of CRIg polypeptides of SEQ ID NO: 2, 4, 6, 8, and the extracellular regions of such polypeptides.

58. The method of claim 57 wherein said CRIg polypeptide is fused to an immunoglobulin sequence.

59. The method of claim 58 wherein the immunoglobulin sequence is an immunoglobulin constant region sequence.

60 The method of claim 59 wherein the immunoglobulin constant region sequence is that of an immunoglobulin heavy chain.

61. The method of claim 60 wherein said immunoglobulin heavy chain constant region sequence is fused to an extracellular domain (ECD) of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8.

62. The method of claim 61 wherein said immunoglobulin heavy chain constant region sequence is that of an IgG.

63. The method of claim 62 wherein said IgG is selected from IgG-1 and IgG-3.

64. The method of claim 62 wherein the IgG-1 heavy chain constant region sequence comprises at least a hinge, CH2 and CH3 region

65. The method of claim 62 wherein the IgG-1 heavy chain constant region sequence comprised a hinge, CH1, CH2 and CH3 region.

66. The method of claim 56 wherein said complement-associated disease is an inflammatory disease or an autoimmune disease.

67. The method of claim 66 wherein said complement-associated disease is selected from the group consisting of rheumatoid arthritis (RA), adult respiratory distress syndrome (ARDS), remote tissue injury after ischemia and reperfusion, complement activation during cardiopulmonary bypass surgery, dermatomyositis, pemphigus, lupus nephritis and resultant glomerulonephritis and vasculitis, cardiopulmonary bypass, cardioplegia-induced coronary endothelial dysfunction, type II membranoproliferative glomerulonephritis, IgA nephropathy, acute renal failure, cryoglobulemia, antiphospholipid syndrome, age-related macular degeneration, uveitis, diabetic retinopathy, allo-transplantation, hyperacute rejection, hemodialysis, chronic occlusive pulmonary distress syndrome (COPD), asthma, aspiration pneumonia, utricaria, chronic idiopathic utricaria, hemolytic uremic syndrome, endometriosis, cardiogenic shock, ischemia reperfusio injury, and multiple sclerosis (MS).

68. The method of claim 66 wherein said complement-associated disease is selected from the group consisting of inflammatory bowel disease (IBD), systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic arthritis, spondyloarthropathies, systemic sclerosis (scleroderma), idiopathic inflammatory myopathies (dermatomyositis, polymyositis), Sjögren's syndrome, systemic vaculitis, sarcoidosis, autoimmune hemolytic anemia (immune pancytopenia, paroxysmal nocturnal hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic purpura, immune-mediated thrombocytopenia), thyroiditis (Grave's disease, Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic thyroiditis), diabetes mellitus, immune-mediated renal disease (glomerulonephritis, tubulointerstitial nephritis), demyelinating diseases of the central and peripheral nervous systems such as multiple sclerosis, idiopathic polyneuropathy, hepatobiliary diseases such as infectious hepatitis (hepatitis A, B, C, D, E and other nonhepatotropic viruses), autoimmune chronic active hepatitis, primary biliary cirrhosis, granulomatous hepatitis, and sclerosing cholangitis, inflammatory and fibrotic lung diseases (*e.g.*, cystic fibrosis), gluten-sensitive enteropathy, Whipple's disease, autoimmune or immune-mediated skin diseases including bullous skin diseases, erythema multiforme and contact dermatitis, psoriasis, allergic diseases of the lung such as eosinophilic pneumonia, idiopathic pulmonary fibrosis and hypersensitivity pneumonitis, transplantation associated diseases including graft rejection, graft-versus host disease, Alzheimer's disease, paroxysmal nocturnal hemoglobinurea, hereditary angioedema and atherosclerosis.

69. The method of claim 66 wherein said complement-associated disease is rheumatoid arthritis (RA), psoriasis or asthma.

70. The method of claim 57 wherein said subject is a mammal.

71. The method of claim 70 wherein said mammal is a human.

72. A method for inhibition of the production of C3b complement fragment in a mammal comprising administering to said mammal an effective amount of a CRIg polypeptide or an agonist thereof.

73. The method of claim 72 wherein said CRIg polypeptide is selected from the group consisting of CRIg polypeptides of SEQ ID NO: 2, 4, 6, 8, and the extracellular regions of such polypeptides.

74. The method of claim 73 wherein said CRIg polypeptide is fused to an immunoglobulin sequence

75. The method of claim 74 wherein the immunoglobulin sequence is an immunoglobulin constant region sequence

76. The method of claim 75 wherein the immunoglobulin constant region sequence is that of an immunoglobulin heavy chain.

77. The method of claim 76 wherein said immunoglobulin heavy chain constant region sequence is fused to an extracellular domain (ECD) of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8.

78. The method of claim 76 wherein said immunoglobulin heavy chain constant region sequence is that of an IgG.

79. The method of claim 78 wherein said IgG is selected from IgG-1 and IgG-3.

80. The method of claim 79 wherein the IgG-1 heavy chain constant region sequence comprises at least a hinge, CH2 and CH3 region.

81. The method of claim 79 wherein the IgG-1 heavy chain constant region sequence comprised a hinge, CH1, CH2 and CH3 region.

82. A method for selective inhibition of the alternative complement pathway in a mammal, comprising administering to said mammal an effective amount of CRIg polypeptide or an agonist thereof.

Claims

1. A CRIg polypeptide, or a CRIg immunoadhesin comprising a CRIg polypeptide fused to an immunoglobulin sequence, for use in the prevention or treatment of a complement-associated eye condition, wherein the CRIg polypeptide or CRIg immunoadhesin is a selective inhibitor of the alternative complement pathway.

2. The CRIg polypeptide or CRIg immunoadhesin of claim 1, wherein the CRIg polypeptide is selected from the group consisting of CRIg polypeptides of SEQ ID NO: 2, 4, 6, 8, and the extracellular domains (ECDs) of said polypeptides.

3. The CRIg polypeptide or CRIg immunoadhesin of claim 2, wherein said CRIg polypeptide is the ECD of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8.

4. The CRIg polypeptide or CRIg immunoadhesin of claim 3, wherein said CRIg polypeptide is the ECD of a CRIg polypeptide of SEQ ID NO: 4 or 6.

5. The CRIg immunoadhesin of claim 1, wherein the immunoglobulin sequence is an immunoglobulin constant region sequence.

6. The CRIg immunoadhesin of claim 5, wherein the immunoglobulin constant region sequence is that of an immunoglobulin heavy chain.

7. The CRIg immunoadhesin of claim 6, wherein the immunoglobulin heavy chain constant region sequence is fused to an extracellular region of a CRIg polypeptide of SEQ ID NO: 2, 4, 6, or 8 to produce a CRIg-Ig fusion protein.

8. The CRIg immunoadhesin of claim 7, wherein said immunoglobulin constant region sequence is that of an IgG.

9. The CRIg immunoadhesin of claim 8, wherein said IgG is IgG-1 or IgG-3.

10. The CRIg immunoadhesin of claim 9, wherein the IgG-1 heavy chain constant region sequence comprises at least a hinge, CH2 and CH3 region.

11. The CRIg immunoadhesin of claim 9, wherein the IgG-1 heavy chain constant region sequence comprises a hinge, CH1, CH2 and CH3 region.

12. The CRIg immunoadhesin of claim 7, wherein the CRIg-Ig fusion protein comprises a linker between the CRIg and the Ig sequences.

13. The CRIg immunoadhesin of claim 7, wherein the CRIg-Ig fusion protein is encoded by a nucleic acid selected from the group consisting of SEQ ID NOS: 20, 21, 25, 26, 27, and 28.

14. The CRIg polypeptide or CRIg immunoadhesin of claim 1 wherein the complement-associated eye condition is selected from the group consisting of age-related macular degeneration (AMD), choroidal neovascularization (CNV), uveitis, diabetic and other ischemia-related retinopathies, endophthalmitis, diabetic macular edema, pathological myopia, von Hippel-Lindau disease, histoplasmosis of the eye, Central Retinal Vein Occlusion (CRVO), corneal neovascularization, and retinal neovascularization.

15. The CRIg polypeptide or CRIg immunoadhesin of claim 14, wherein the complement-associated eye disease is age-related macular degeneration (AMD) or choroidal neovascularization (CNV).

16. The CRIg polypeptide or CRIg immunoadhesin of claim 15, for use in the prevention of CNV.

17. The CRIg polypeptide or CRIg immunoadhesin of claim 15, for use in the prevention of the progression of AMD.

18. The CRIg polypeptide or CRIg immunoadhesin of claim 17, for use in the prevention of the progression of AMD into CNV.

19. A CRIg polypeptide, or a CRIg immunoadhesin comprising a CRIg polypeptide fused to an immunoglobulin sequence, for use in the prevention of the development or progression of age-related macular degeneration (AMD) in a subject at risk of developing or diagnosed with AMD in at least one eye.

20. The CRIg polypeptide of claim 19, which is as defined in claim 3 or claim 4.

21. The CRIg immunoadhesin of claim 19, wherein the fusion polypeptide comprises the extracellular domain of a polypeptide of SEQ ID NO: 4 or 6 fused to an immunoglobulin heavy chain constant region sequence.

22. The CRIg immunoadhesin of claim 21, wherein the fusion polypeptide is selected from the group consisting of fusion polypeptides encoded by the nucleotide sequences of SEQ ID NO: 20, 21, 25, 26, 27, and 28.

23. The CRIg polypeptide or CRIg immunoadhesin of any one of claims 19-22, wherein the subject is a human.

24. The CRIg polypeptide or CRIg immunoadhesin of claim 23, wherein the human subject has been diagnosed with AMD in at least one eye.

25. The CRIg polypeptide or CRIg immunoadhesin of claim 24, wherein said AMD is category 3 or category 4 dry AMD.

26. The CRIg polypeptide or CRIg immunoadhesin of claim 25, wherein said subject has been identified to be at risk to develop CNV.

27. The CRIg polypeptide or CRIg immunoadhesin of claim 26, wherein said subject is genetically at risk of developing CNV.

28. The CRIg polypeptide or CRIg immunoadhesin of claim 25, wherein said human subject has been diagnosed with AMD in both eyes.

29. The CRIg polypeptide or CRIg immunoadhesin of claim 28, wherein said human subject has category 3 or category 4 AMD in both eyes.

30. The CRIg polypeptide or CRIg immunoadhesin of claim 23, which slows down the progression of AMD.

31. The CRIg polypeptide or CRIg immunoadhesin of clam 25, which delays the progression of AMD into CNV.

32. The CRIg polypeptide or CRIg immunoadhesin of claim 23, which prevents the progression of AMD into CNV.

33. The CRIg polypeptide or CRIg immunoadhesin of claim 24, wherein the human subject has been diagnosed with AMD in one eye only.

34. The CRIg polypeptide or CRIg immunoadhesin of claim 33, which delays the development of AMD in the other eye.

35. The CRIg polypeptide or CRIg immunoadhesin of claim 33, which prevents the development of AMD in the other eye.

36. The CRIg polypeptide or CRIg immunoadhesin of claim 23, which is for administration by intravitreal injection.

37. The CRIg polypeptide or CRIg immunoadhesin of claim 23, which is for administration with an additional agent for the prevention or treatment of AMD or CNV.

38. The CRIg polypeptide or CRIg immunoadhesin of claim 37, wherein said additional agent is an anti-VEGF-A antibody.

39. A CRIg polypeptide, or a CRIg immunoadhesin comprising a CRIg polypeptide fused to an immunoglobulin sequence, for use in the prophylactic or therapeutic treatment of dry age-related macular degeneration (AMD).

40. The CRIg polypeptide or CRIg immunoadhesin for the use as defined in claim 39, which is as defined in any one of claims 2-11.