CLAIMS

1. Use of an effective amount of sulfobutyl ether β-Cyclodextrin (SBE-βCD) or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for preventing or treating an eye disease associated with retinal cell lipofuscin bisretinoid accumulation without impairing visual acuity in a subject in need thereof, wherein the eye disease associated with retinal cell lipofuscin bisretinoid accumulation is selected from the group consisting of Stargardt disease (STGD), retinitis pigmentosa (RP), Age-Related Macular Degeneration (AMD), Best disease (BD), and cone-rod dystrophy.

2. The use of claim 1, wherein the eye disease is genetic, non-genetic, or associated with aging.

3. Use of an effective amount of sulfobutyl ether β-Cyclodextrin (SBE-βCD) or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for preventing or treating retinal cell lipofuscin bisretinoid accumulation without impairing visual acuity in a subject in need thereof, wherein the subject is diagnosed with or at risk for Stargardt disease (STGD), retinitis pigmentosa (RP), Age-Related Macular Degeneration (AMD), Best disease (BD), or cone-rod dystrophy.

4. The use of any one of claims 1-3, wherein administration of the effective amount of the SBE-βCD or pharmaceutically acceptable salt thereof prevents exacerbation of lipid bisretinoid-containing lipofuscin-associated retinal damage in the subject.

5. Use of an effective amount of sulfobutyl ether β-Cyclodextrin (SBE-βCD) or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for reducing lipofuscin bisretinoid accumulation in retinal pigment epithelium cells without impairing visual acuity in a subject wherein the medicament is to be placed in contact with the retinal pigment epithelium cells of the subject, wherein the subject is diagnosed with or at risk for Stargardt disease (STGD), retinitis pigmentosa (RP), Age-Related Macular Degeneration (AMD), Best disease (BD), or cone-rod dystrophy.

6. The use of any one of claims 1-5, wherein the SBE-βCD or pharmaceutically acceptable salt thereof is configured to localize to retinal pigment epithelium cells.

7. The use of claim 6, wherein the SBE-βCD or pharmaceutically acceptable salt thereof is configured to complex with lipofuscin bisretinoid lipids in the retinal pigment epithelium cells.

8. The use of any one of claims 1-7, wherein administration of the medicament blocks, mitigates, or reverses accumulation of lipofuscin in retinal pigment epithelium cells.

9. The use of claim 7 or 8, wherein the lipofuscin bisretinoid lipids are selected from the group consisting of N-retinylidene-N-retinylethanolamine (A2E), an A2E isomer, an oxidized derivative of A2E, and all-trans-retinal dimers.

10. The use of any one of claims 1-9, wherein the SBE-βCD or pharmaceutically acceptable salt thereof is coupled to an agent that targets retinal pigment epithelium cells.

11. The use of claim 10, wherein the agent targets endosomes or lysosomes in the retinal pigment epithelium cells.

12. The use of claim 10 or 11, wherein the agent is mannose 6-phosphate.

13. The use of any one of claims 1-12, wherein the medicament is to be administered *via* topical, intravitreous, intraocular, subretinal, or subscleral administration.

14. The use of claim 13, wherein subscleral administration is to be achieved via a slow-release subscleral implant in the subject.

15. The use of any one of claims 1-14, wherein the SBE-βCD or pharmaceutically acceptable salt thereof is coupled to a fluorophore.

16. Sulfobutyl ether β-Cyclodextrin (SBE-βCD) or a pharmaceutically acceptable salt thereof for use in preventing or treating:

i) retinal cell lipofuscin bisretinoid accumulation; or

ii) an eye disease associated with retinal cell lipofuscin bisretinoid accumulation;

without impairing visual acuity in a subject in need thereof; or

for use in reducing lipofuscin bisretinoid accumulation in retinal pigment epithelium cells without impairing visual acuity in a subject

wherein the subject is diagnosed with or at risk for Stargardt disease (STGD), retinitis pigmentosa (RP), Age-Related Macular Degeneration (AMD), Best disease (BD), or cone-rod dystrophy.

17. A pharmaceutical composition comprising sulfobutyl ether β-Cyclodextrin or a pharmaceutically acceptable salt thereof as an active pharmaceutical ingredient, wherein the pharmaceutical composition is formulated for intravitreal injection.

18. The pharmaceutical composition of claim 17, wherein the active pharmaceutical ingredient consists of sulfobutyl ether β-Cyclodextrin or a pharmaceutically acceptable salt.

19. The pharmaceutical composition of claim 17 for preventing or treating an eye disease associated with retinal cell lipofuscin accumulation without impairing visual acuity in a subject in need thereof, wherein the sulfobutyl ether β-Cyclodextrin or pharmaceutically acceptable salt thereof is present in an amount effective to reduce lipid bisretinoid levels in a retina of the subject, wherein the eye disease associated with retinal cell lipofuscin bisretinoid accumulation is selected from the group consisting of Stargardt disease (STGD), retinitis pigmentosa (RP), Age-Related Macular Degeneration (AMD), Best disease (BD), and cone-rod dystrophy.

20. The pharmaceutical composition of claim 19, wherein the eye disease is genetic.

21. The pharmaceutical composition of claim 19, wherein the eye disease is associated with aging.

22. The pharmaceutical composition of claim 19, wherein the amount of the sulfobutyl ether β-Cyclodextrin or pharmaceutically acceptable salt thereof is effective to prevent exacerbation of lipid bisretinoid-containing lipofuscin-associated retinal damage in the subject.

23. The pharmaceutical composition of claim 19 wherein the amount of the sulfobutyl ether β-Cyclodextrin or pharmaceutically acceptable salt thereof blocks, mitigates, or reverses accumulation of lipofuscin bisretinoid lipids in retinal pigment epithelium cells.