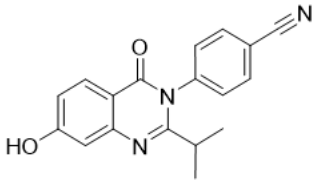
What is claimed is:

1. Use of a compound of Formula I (4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzonitrile) having structure:



Formula I,

or a salt, solvate, polymorph, or co-crystal thereof, in the manufacture of a medicament for the treatment of ocular surface pain in a subject in need thereof, wherein an effective amount of the compound or a salt, solvate, polymorph, or co-crystal thereof is to be administered ocularly to the subject.

2. The use according to claim 1, wherein the ocular surface pain is chronic ocular surface pain (COSP).

3. The use according to claim 1, wherein the compound of formula I is to be administered to the cornea of the subject.

4. The use of any of the preceding claims, comprising the compound of formula I to be administered at a concentration of about 0.5% w/v to about 3.5% w/v, about 0.5% w/v to about 2.5% w/v, or about 0.5% w/v to about 1.5 w/v, about 0.5% to about 3.0% w/v, about 1.0% to about 2.5% w/v, about 1.5% to about 3.0% w/v, or about 0.5% to about 2.5% w/v.

5. The use of claim 4, comprising the compound of formula I to be administered at a concentration of about 0.5% w/v, about 1.0% w/v, about 1.5% w/v, about 2.0% w/v, about 2.5% w/v, about 3.0% w/v, or about 3.5% w/v.

6. The use according to any of the preceding claims, wherein the COSP is associated with dry eye disease.

7. The use according to claim 6, wherein the administration results in a decrease in the symptoms of dry eye disease.

8. The use according to claim 6, wherein the administration results in a decrease in the ocular pain associated with dry eye disease.

9. The use according to claim 7, wherein the administration results in reduced incidence of at least about 10% in one or more of ocular dryness, ocular discomfort, ocular

hyperemia, ocular burning or stinging, grittiness or foreign body sensation, or photophobia.

10. The use according to any of claims 1-5, wherein the subject suffers from one or more of dry eye disease, Sjogren's Syndrome, conjunctivitis (including keratoconjuctivitis, vernal keratoconjunctivitis, allergic conjunctivitis), Map-Dot-Fingerprint Dystrophy, acanthamoeba, fibromyalgia, Meibomian gland dysfunction, thyroid eye disease, rosacea, ptosis, keratoconus, ocular pain syndrome, Steven-Johnson's syndrome, corneal epitheliopathies, corneal neuropathies (including LASIK induced corneal neuropathies), corneal dystrophies (including recurrent corneal dystrophies), epithelial basement membrane dystrophy, corneal erosions or abrasions (including recurrent corneal erosions or abrasions), ocular surface diseases, blepharitis, graft vs host disease, meibomitis, glaucoma, conjunctivochalasis, keratopathis (including herpetic keratopathy, filamentary keratopathy, band or bullous keratopathy, exposure keratopathy), keratitis (including herpes simplex virus keratitis), iritis, episclentis, corneal surgery, multiple sclerosis, trichiasis, pterygium, neuralgia, xerophthalmia, patients recovering from neurotrophic keratitis, or ocular pain persisting for at least three months after photorefractive keratectomy (PRK) surgery or laser-assisted in situ keratomileusis (LASIK) surgery.

11. The use according to any of the preceding claims, further comprising an additional therapeutic agent to be administered to the subject.

12. The use according to any of the preceding claims, wherein the administration results in a reduction in a pain score of at least about 3, at least about 4, at least about 5, at least about 6, at least about 7, at least about 8, at least about 9 or at least about 10, compared to a placebo, when measured on a visual analog scale (VAS).

13. The use according to any of the preceding claims, wherein the administration results in a reduction in the subject's pain score of at least about 6, at least about 7, at least about 8, at least about 9 or at least about 10, compared to a placebo, when measured on the VAS .

14. The use according to any of claims 1-11, wherein the administration results in a reduction in the subject's pain of at least about 10%, at least about 15%, at least about 20%, or at least about 25%, compared to a placebo.

15. The use according to claims 12 or 13, wherein the reduction in the pain score arises from the difference in pain scores prior to and after administration of compound of formula I to the subject.

16. The use according to any of claims 12-15, wherein the reduction in VAS score occurs within about half hour after administration of compound of formula I to the subject.

17. The use according to any of the preceding claims, wherein the administration results in a reduction in hyperemia in the subject of at least about 1, at least about 2, at least about 3, at least about 4, or at least about 5, on the McMonnies scale.

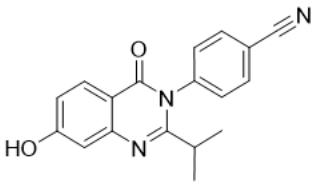
18. The use according to any of the preceding claims, wherein the administration does not result in a change in one or more of best corrected visual acuity, slit-lamp biomicroscopy, dilated eye exam, blink rate, tear production, intraocular pressure, compared to a placebo.

19. The use according to any of the preceding claims, wherein the compound of formula I is to be administered for at least about one, at least about two, or at least about three months.

20. The use according to any of the preceding claims, wherein the compound of formula I is to be administered for greater than 3 months.

21. The use according to any of the preceding claims, wherein the compound of formula I is to be administered one to four times daily.

22. A compound of formula I



Formula I,

or a salt, solvate, polymorph, or co-crystal thereof,
for use in the treatment or reduction of ocular surface pain.

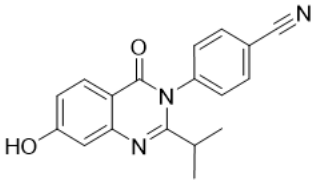
23. The compound for use according to claim 22, wherein the ocular surface pain is chronic ocular surface pain lasting for at least 1 month, at least 2 months, or at least 3 months.

24. The compound for use according to any of claims 22-23, wherein the compound of formula I is to be administered at a concentration of about 0.5% w/v to about 3.5%

w/v, about 0.5% w/v to about 2.5% w/v, or about 0.5% w/v to about 1.5 w/v, about 0.5% to about 3.0% w/v, about 1.0% to about 2.5% w/v, about 1.5% to about 3.0% w/v, or about 0.5% to about 2.5% w/v.

25. The compound for use according to any of claims 22-24, wherein the compound of formula I is to be administered at a concentration of about 0.5% w/v, about 1.0% w/v, about 1.5% w/v, about 2.0% w/v, about 2.5% w/v, about 3.0% w/v, or about 3.5% w/v.

26. A medicine for use in treating or reducing ocular surface pain containing an active ingredient that is a compound of formula I



Formula I

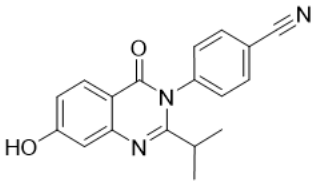
or a salt, solvate, polymorph, or co-crystal thereof.

27. The medicine for use according to claim 26, wherein the ocular surface pain is chronic ocular surface pain lasting for at least 1 month, at least 2 months, or at least 3 months.

28. The medicine for use according to any of claims 26-27, wherein the compound of formula I is to be administered at a concentration of about 0.5% w/v to about 3.5% w/v, about 0.5% w/v to about 2.5% w/v, or about 0.5% w/v to about 1.5 w/v, about 0.5% to about 3.0% w/v, about 1.0% to about 2.5% w/v, about 1.5% to about 3.0% w/v, or about 0.5% to about 2.5% w/v.

29. The medicine for use according to any of claims 26-28, wherein the compound of formula I is to be administered at a concentration of about 0.5% w/v, about 1.0% w/v, about 1.5% w/v, about 2.0% w/v, about 2.5% w/v, about 3.0% w/v, or about 3.5% w/v.

30. Use of a compound of formula I



Formula I

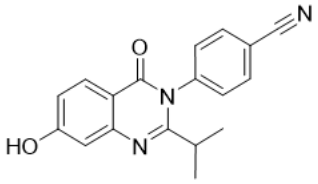
or a salt, solvate, polymorph, or co-crystal thereof in the manufacture of a medicament for the treatment or reduction of ocular surface pain.

31. The use according to claim 30, wherein the ocular surface pain is chronic ocular surface pain lasting for at least 1 month, at least 2 months, or at least 3 months.

32. The use according to any of claims 30-31, wherein the compound of formula I is to be administered at a concentration of about 0.5% w/v to about 3.5% w/v, about 0.5% w/v to about 2.5% w/v, or about 0.5% w/v to about 1.5 w/v, about 0.5% to about 3.0% w/v, about 1.0% to about 2.5% w/v, about 1.5% to about 3.0% w/v, or about 0.5% to about 2.5% w/v.

33. The use according to any of claims 30-32, wherein the compound of formula I is to be administered at a concentration of about 0.5% w/v, about 1.0% w/v, about 1.5% w/v, about 2.0% w/v, about 2.5% w/v, about 3.0% w/v, or about 3.5% w/v.

34. Use of a compound of Formula I (4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzonitrile)having structure:



Formula I,

or a salt, solvate, polymorph, or co-crystal thereof, in the manufacture of a medicament for reducing ocular surface pain in a subject in need thereof wherein the compound of formula I is to be administered ocularly at a concentration of about 0.5% w/v to about 3.5% w/v, about 0.5% w/v to about 2.5% w/v, or about 0.5% w/v to about 1.5 w/v, about 0.5% to about 3.0% w/v, about 1.0% to about 2.5% w/v, about 1.5% to about 3.0% w/v, or about 0.5% to about 2.5% w/v.

35. The use according to claim 34, wherein the ocular surface pain is chronic ocular surface pain (COSP).

36. The use according to claims 34 or 35, wherein the COSP is associated with dry eye disease.

37. The use according to claim 34, wherein the administration results in a decrease in the symptoms of dry eye disease.

38. The use according to claim 36, wherein the administration results in a decrease in the ocular pain associated with dry eye disease.

39. The use according to claim 38, wherein the administration results in reduced incidence of at least about 10% in one or more of ocular dryness, ocular discomfort, ocular hyperemia, ocular burning or stinging, grittiness or foreign body sensation, or photophobia.

40. The use according to any of claims 34-39, wherein the subject suffers from one or more of dry eye disease, Sjogren's Syndrome, conjunctivitis (including keratoconjuctivitis, vernal keratoconjunctivitis, allergic conjunctivitis), Map-Dot-Fingerprint Dystrophy, acanthamoeba, fibromyalgia, Meibomian gland dysfunction, thyroid eye disease, rosacea, ptosis, keratoconus, ocular pain syndrome, Steven-Johnson's syndrome, corneal epitheliopathies, corneal neuropathies (including LASIK induced corneal neuropathies), corneal dystrophies (including recurrent corneal dystrophies), epithelial basement membrane dystrophy, corneal erosions or abrasions (including recurrent corneal erosions or abrasions), ocular surface diseases, blepharitis, graft vs host disease, meibomitis, glaucoma, conjunctivochalasis, keratopathis (including herpetic keratopathy, filamentary keratopathy, band or bullous keratopathy, exposure keratopathy), keratitis (including herpes simplex virus keratitis), iritis, episclentis, corneal surgery, multiple sclerosis, trichiasis, pterygium, neuralgia, xerophthalmia, patients recovering from neurotrophic keratitis, or ocular pain persisting for at least three months after photorefractive keratectomy (PRK) surgery or laser-assisted in situ keratomileusis (LASIK) surgery.

41. The use according to any of claims 34-40, further comprising an additional therapeutic agent to be administered to the subject.

42. The use according to any of claims 34-41, wherein the administration results in a reduction in the subject's pain score of at least about 3 as compared to a pain score prior to administration of the compound, when measured on a visual analog scale (VAS).

43. The use according to any of claims 34-41, wherein the administration results in a reduction in a pain score of at least about 3, at least about 4, at least about 5, at least about 6, at least about 7, at least about 8, at least about 9 or at least about 10, compared to a placebo, when measured on a visual analog scale (VAS).

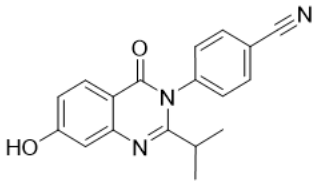
44. The use according to any of claims 34-42, wherein the administration results in a reduction in the subject's pain score of at least about 6, at least about 7, at least about 8, at least about 9 or at least about 10, compared to a placebo, when measured on the VAS.

45. The use according to any of claims 34-44, wherein the administration results in a reduction in the subject's pain of at least about 10%, at least about 15%, at least about 20%, or at least about 25%, compared to a placebo.

46. The use according to claims 42 - 45, wherein the reduction in the pain score arises from the difference in pain scores prior to and after administration of compound I to the subject.

47. The use according to any of claims 34-46, wherein the administration results in a reduction in hyperemia in the subject of at least about 1, at least about 2, at least about 3, at least about 4, or at least about 5, on the McMonnies scale.

48. Use of a compound of Formula I (4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzonitrile) having structure:



Formula I,

or a salt, solvate, polymorph, or co-crystal thereof, in the manufacture of a medicament for reducing ocular hyperemia in a subject in need thereof, wherein the compound of formula I is to be administered ocularly at a concentration of about 0.5% w/v to about 3.5% w/v, about 0.5% w/v to about 2.5% w/v, or about 0.5% w/v to about 1.5 w/v, about 0.5% to about 3.0% w/v, about 1.0% to about 2.5% w/v, about 1.5% to about 3.0% w/v, or about 0.5% to about 2.5% w/v.

49. The use according to claim 48, wherein the reduction in ocular hyperemia is at least about 1, at least about 2, at least about 3, at least about 4, or at least about 5, on the McMonnies scale.

50. The use according to any of claims 48-49, wherein the administration results in reduced incidence of at least about 10% in one or more of ocular dryness, ocular discomfort, ocular burning or stinging, grittiness or foreign body sensation, or photophobia.

51. The use according to any of claims 48-50, wherein the subject suffers from one or more of dry eye disease, Sjogren's Syndrome, conjunctivitis (including keratoconjuctivitis, vernal keratoconjunctivitis, allergic conjunctivitis), Map-Dot-Fingerprint Dystrophy, acanthamoeba, fibromyalgia, Meibomian gland dysfunction, thyroid eye disease, rosacea, ptosis, keratoconus, ocular pain syndrome, Steven-Johnson's syndrome, corneal epitheliopathies, corneal neuropathies (including LASIK induced corneal neuropathies), corneal dystrophies (including recurrent corneal dystrophies), epithelial basement membrane dystrophy, corneal erosions or abrasions (including recurrent corneal erosions or abrasions), ocular surface diseases, blepharitis, graft vs host disease, meibomitis, glaucoma, conjunctivochalasis, keratopathis (including herpetic keratopathy, filamentary keratopathy, band or bullous keratopathy, exposure keratopathy), keratitis (including herpes simplex virus keratitis), iritis, episclentis, corneal surgery, multiple sclerosis, trichiasis, pterygium, neuralgia, xerophthalmia, patients recovering from neurotrophic keratitis, or ocular pain persisting for at least three months after photorefractive keratectomy (PRK) surgery or laser-assisted in situ keratomileusis (LASIK) surgery.

52. The use according to any of claims 48-51, further comprising an additional therapeutic agent to be administered to the subject.