

fonic acid, 2-(chlorosulfonyl)-anthraquinone, 2-acrylamido-2-methyl-1-propane sulfonic acid, 8-hydroxyquinoline-5-sulfonic acid, and beta-styrene sulfonfyl chloride.

10. The method according to claim 9, wherein the sulfonating agent is 2-(chlorosulfonyl)-anthraquinone or anthraquinone-1,5-disulfonic acid.

11. The method according to claim 1, wherein the initiator is a member selected from the group consisting of UV irradiation, sodium persulfate, sodium thiosulfate, ferrous chloride tetrahydrate, sodium bisulfite and an oxidative enzyme.

12. The method according to claim 11, wherein the initiator is UV irradiation.

13. The method according to claim 11, wherein the initiator is sodium persulfate.

14. The method according to claim 11, wherein the oxidative enzyme is peroxidase or catechol oxidase.

15. A method for sealing lenticules onto a corneal surface comprising the steps of:

placing said lenticule onto a corneal surface;
applying a polymerizable collagen composition onto said lenticule and said corneal surface to form a collagen coating over said lenticule and said corneal surface; and

exposing said coating to an initiator so as to polymerize said coating and seal said lenticule onto said corneal surface.

16. The method according to claim 15, wherein the collagen is at least one member selected from the group consisting of purified Type I collagen, purified Type III collagen, purified Type IV collagen and collagen rich tissue.

17. The method according to claim 16, wherein the Type I collagen is derived from human tissue or animal tissue.

18. The method according to claim 17, wherein the Type I collagen comprises autogenic human tissue.

19. The method according to claim 15, wherein the polymerizable collagen comprises a reaction product of collagen with at least one acylating agent selected from the group consisting of glutaric anhydride, succinic anhydride, lauric anhydride, diglycolic anhydride, methyl succinic anhydride, methyl glutaric anhydride, dimethyl glutaric anhydride, exo-3,6-epoxy-1,2,3,4-tetrahydrophthalicanhydride, 3,6-endoxo-3-methylhexahydrophthalic anhydride, endo-3,6-dimethyl-3,6-endoxohexahydrophthalic anhydride, methacrylic anhydride, succinyl chloride, glutaryl chloride, and lauryl chloride.

20. The method according to claim 19, wherein the acylating agent is glutaric anhydride.

21. The method according to claim 19, wherein the acylating agent is methacrylic anhydride.

22. The method according to claim 19, wherein the acylating agent is exo-3,6-epoxy-1,2,3,4-tetrahydrophthalic anhydride.

23. The method according to claim 15, wherein the polymerizable collagen comprises a reaction product of collagen with at least one sulfonating agent selected from the group consisting of anthraquinone-1,5-disulfonic acid, 2-(chlorosulfonyl)-anthraquinone, 2-acrylamido-2-methyl-1-propane sulfonic acid, 8-hydroxyquinoline-5-sulfonic acid, and beta-styrene sulfonfyl chloride.

24. The method according to claim 23, wherein the sulfonating agent is 2-(chlorosulfonyl)-anthraquinone or anthraquinone-1,5-disulfonic acid.

25. The method according to claim 15, wherein the initiator is a member selected from the group consisting of irradiation, sodium persulfate, sodium thiosulfate,

ferrous chloride tetrahydrate, sodium bisulfite and an oxidative enzyme.

26. The method according to claim 25, wherein the initiator is UV irradiation.

27. The method according to claim 25, wherein the initiator is sodium persulfate.

28. The method according to claim 25, wherein the oxidative enzyme is peroxidase or catechol oxidase.

29. A method for sealing lenticules onto a corneal surface comprising the steps of:

placing said lenticule onto a corneal surface;
applying a polymerizable collagen composition around a periphery of said lenticule and an adjacent area of said cornea to form a collagen coating around said lenticule periphery and said adjacent corneal area; and

exposing said coating to an initiator so as to polymerize said coating and seal said lenticule onto said corneal surface.

30. The method according to claim 29, wherein the collagen is at least one member selected from the group consisting of purified Type I collagen, purified Type III collagen, purified Type IV collagen and collagen rich tissue.

31. The method according to claim 30, wherein the Type I collagen is derived from human tissue or animal tissue.

32. The method according to claim 31, wherein the Type I collagen comprises autogenic human tissue.

33. The method according to claim 29, wherein the polymerizable collagen comprises a reaction product of collagen with at least one acylating agent selected from the group consisting of glutaric anhydride, succinic anhydride, lauric anhydride, diglycolic anhydride, methyl succinic anhydride, methyl glutaric anhydride, dimethyl glutaric anhydride, exo-3,6-epoxy-1,2,3,4-tetrahydrophthalicanhydride, 3,6-endoxo-3-methylhexahydrophthalic anhydride, endo-3,6-dimethyl-3,6-endoxohexahydrophthalic anhydride, methacrylic anhydride, succinyl chloride, glutaryl chloride, and lauryl chloride.

34. The method according to claim 33, wherein the acylating agent is glutaric anhydride.

35. The method according to claim 33, wherein the acylating agent is methacrylic anhydride.

36. The method according to claim 33, wherein the acylating agent is exo-3,6-epoxy-1,2,3,4-tetrahydrophthalic anhydride.

37. The method according to claim 29, wherein the polymerizable collagen comprises a reaction product of collagen with at least one sulfonating agent selected from the group consisting of anthraquinone-1,5-disulfonic acid, 2-(chlorosulfonyl)anthraquinone, 2-acrylamido-2-methyl-1-propane sulfonic acid, 8-hydroxyquinoline-5-sulfonic acid, and beta-styrene sulfonfyl chloride.

38. The method according to claim 37, wherein the sulfonating agent is 2-(chlorosulfonyl)-anthraquinone or anthraquinone-1,5-disulfonic acid.

39. The method according to claim 29, wherein the initiator is a member selected from the group consisting of I/V irradiation, sodium persulfate, sodium thiosulfate, ferrous chloride tetrahydrate, sodium bisulfite and an oxidative enzyme.

40. The method according to claim 39, wherein the initiator is UV irradiation.

41. The method according to claim 39, wherein the initiator is sodium persulfate.

42. The method according to claim 39, wherein the oxidative enzyme is peroxidase or catechol oxidase.