

We Claim:

1. A keratoprosthesis (Kpro) device comprising:
an anchor body; and
a plurality of flexible haptics, wherein the plurality of flexible haptics are attached to and are capable of extending radially from the anchor body.
2. The Kpro device of claim 1, further comprising a front plate, wherein the front plate is attached to the anchor body such that the Kpro device is a single implantable device.
3. The Kpro device of claim 2, wherein the anchor body is a cannula or a cylinder.
4. The Kpro device of any one of claims 2-3, wherein the anchor body has an inner diameter and an outer diameter, wherein the inner diameter ranges from about 1 mm to about 8 mm, and wherein the inner diameter ranges from about 1 mm to about 8 mm.
5. The Kpro device of claim 4, wherein the diameter front plate is substantially the same as the outer diameter of the anchor body.
6. The Kpro device of claim 4, wherein the diameter front plate is different than the outer diameter of the anchor body.
7. The Kpro device of claim 6, wherein the diameter of the front plate is larger than the outer diameter of the anchor body.
8. The Kpro device of any one of claims 2-3, wherein the anchor body can have a height of about 0.5 mm to about 3 mm as measured from the bottom of the anchor body to the bottom of the front plate.
9. The Kpro device of any one of claims 2-3, wherein the front plate is curved along the portion of the front plate that is distal to the anchor body.
10. The Kpro device of any one of claims 2-3, wherein the front plate forms a half-sphere.

11. The Kpro device of any one of claims 2-3, wherein the plurality of haptics are all attached to the anchor body at substantially the same height along the circumference of the anchor body as measured from the bottom of the anchor body.

12. The Kpro device of any one of claims 2-3, wherein at least two of the plurality of haptics are attached to the anchor body at different heights along the circumference of the anchor body as measured from the bottom of the anchor body.

13. The Kpro device of claim 12, wherein the plurality of haptics are positioned on the anchor body such that plurality of haptics form two groups of haptics, wherein each group comprises at least one haptic, wherein the at least one haptic of the first group is attached to the anchor body along its circumference at a first height and the at least one haptic of the second group is attached to the anchor body along its circumference at a second height, wherein the first and the second height are measured from the bottom of the anchor body and the first and the second height are different.

14. The Kpro device of any one of claims 2-3, wherein all components of the Kpro device are flexible.

15. The Kpro device of any one of claims 2-3, wherein the Kpro device is implantable using a minimally invasive incision.

16. The Kpro device of claim 15, wherein the minimally invasive incision is about 3 mm.

17. The Kpro device of claim 1, wherein the anchor body is configured to couple to a front plate during implantation.

18. The Kpro device of claim 17, wherein the anchor body is a ring having an inner diameter and an outer diameter ranges from about 1 mm to about 8 mm, and wherein the inner diameter ranges from about 1 mm to about 8 mm.

19. The Kpro device of any one of claims 17-18, wherein the front plate comprises an anterior portion and a posterior stem portion, wherein the stem portion is configured to couple to the anchor body during implantation.

20. The Kpro device of claim 19, wherein the anterior portion of the front plate is substantially round as measured along a first axis.

21. The Kpro device of claim 19, wherein the stem portion is a cannula or a solid cylinder, and wherein the stem portion has an outer diameter.

22. The Kpro device of claim 21, wherein the diameter of the anterior portion of the front plate as measured along the first axis is substantially the same as the outer diameter of the stem portion as measured along the same axis.

23. The Kpro device of claim 22, wherein the diameter of the anterior portion of the front plate as measured along the first axis is different than the outer diameter of the stem portion as measured along the same axis.

24. The Kpro device of claim 19, wherein the stem portion is threaded and wherein the anchor body is configured to be screwed onto the stem during implantation.

25. The Kpro device of claim 1, wherein at least one of the plurality of haptics can have a hole.

26. The Kpro device of claim 1, wherein the plurality of haptics are in a first position prior to implantation and a second position after implantation, wherein the plurality of haptics are folded in towards the anchor body when in the first position and are extended radially away from the anchor body when in the second position.

27. A method of implanting a keraposthesis (Kpro) device of any of claims 1-26 into an eye, wherein the method comprises:

folding the plurality of flexible haptics in towards the center of the anchor body;
inserting the anchor body into the eye through an incision; and

un-folding the plurality of flexible haptics such that they extend radially away from the anchor body into a portion of the eye.

28. The method of claim 27, wherein the incision is a minimally invasive incision.

29. The method of claim 27, wherein the incision is about 3 mm or less.

30. The method of any one of claims 27-29, wherein the Kpro device is as in any one of claims 17-24; the method further comprising:

inserting the front plate into the eye through the incision; and
coupling the stem portion of the front plate to the anchor body.