I/WE CLAIM:

1. A medical device for ~~management of an axial length growth of~~ an eye of a subject, the eye having a pupil, the medical device comprising:

a central region having a first power;

a transition region surrounding the central region and having a width at most equal to 1.5 mm; and

a peripheral region surrounding the transition region, the peripheral region having a second power chosen based on the first power to achieve a target net power associated with the peripheral region, the target net power being the addition of the first power and the second power,

wherein a surface area of each one of the central and peripheral regions is chosen as a function of a surface area of the pupil of the eye~~.~~, and

~~2. The medical device of claim 1, wherein the surface area of the pupil of the eye corresponds to a surface area of the pupil of the eye evaluated in photopic condition, when the subject is looking at distance with uncovered eyes.~~

~~3. The medical device of claim 1 or 2~~wherein a variation of a third power within the transition region is steep between the first power and the second power so that the transition region generates no optically usable power.

2. The medical device of claim 1, wherein the central and peripheral regions are adapted to treat at least one of myopia and astigmatism~~.~~

~~4. The medical device of claim 3,~~, and wherein a surface area of the central region and the transition region is comprised between about 20% and about 40% of the surface area of the pupil of the eye.

~~5.~~3. The medical device of claim ~~4~~2, wherein the first power of the central region is comprised between about -0.25 diopter and about -30 diopters for said myopia and between about -0.25 diopter and about -10 diopters for said astigmatism.

~~6.~~4. The medical device of claim ~~5, wherein the second power of the peripheral region is determined as a function of a target net power and the first power of the central region.~~

~~7. The medical device of claim 6~~3, wherein the target net power is comprised between about +3.5 diopters and about +10 diopters, and the second power is comprised between about +3.75 diopters and about +20 diopters.

~~8.~~5. The medical device of claim ~~6~~4, wherein the target net power is equal to about +5 diopters.

~~9.~~6. The medical device of claim 1 ~~or 2, wherein the central and peripheral regions are adapted to treat hyperopia.~~

~~10. The medical device of claim 9, wherein a surface area of the central region and the transition region is comprised between about 30% and about 50% of the surface area of the pupil of the eye.~~

~~11. The medical device of claim 10, wherein the first power of the central region is comprised between about +0.25 diopter and +25 diopters.~~

~~12. The medical device of claim 11, wherein the second power of the peripheral region is determined as a function of a target net power and the first power of the central region.~~

~~13. The medical device of claim 12, wherein the target net power is comprised between about -3.5 diopters and about -10 diopters and the second power of the peripheral region is comprised between about -3.75 diopters and -20 diopters.~~

~~14. The medical device of claim 13, wherein the target net power of the peripheral region is equal to about -5 diopters.~~

~~15. The medical device of claim 1 or 2~~, wherein the central and peripheral regions are adapted to treat presbyopia.

~~16.~~7. The medical device of claim ~~15~~6, wherein the medical device corresponds to a distance-centered device~~.~~

~~17. The medical device of claim 16, wherein~~, and a surface area of the central portion and the transition portion is comprised between about 20% and about 30% of the surface area of the pupil of the eye.

~~18.~~8. The medical device of claim ~~17~~7, wherein the first power of the central region is comprised between about -30 diopters and about +25 diopters~~.~~

~~19. The medical device of claim 18, wherein~~, and the peripheral region is provided with an add-power comprised between about +0.25 diopter and about +5 diopters.

~~20.~~9. The medical device of claim ~~19~~8, wherein the add-power of the peripheral region is equal to about +2.5 diopters.

~~21.~~10. The medical device of claim ~~15~~6, wherein the medical device corresponds to a near-centered device~~.~~

~~22. The medical device of claim 21, wherein~~, and a surface area of the central portion and the transition portion is comprised between about 10% and about 30% of the surface area of the pupil of the eye.

~~23.~~11. The medical device of claim ~~22~~10, wherein the second power of the peripheral region is comprised between about ~~-~~–30 diopters and +25 diopters~~.~~

~~24. The medical device of claim 23, wherein~~, and the central region is provided with an add-power comprised between about +0.25 diopters and about +5 diopters.

~~25.~~12. The medical device of claim ~~24~~11, wherein the add-power of the central region is equal to about +2.5 diopters.

~~26.~~13. The medical device of ~~any one of claims~~claim 1 ~~to 25, wherein the second power is constant throughout the peripheral region.~~

~~27. The medical device of any one of claims 1 to 25~~, wherein the peripheral region comprises a plurality of angular sections each having a respective power and two adjacent ones of the plurality of angular sections are provided with different powers.

~~28.~~14. The medical device of claim ~~27, wherein two adjacent ones of the plurality of angular sections are provided with different powers.~~

~~29. The medical device of claim 28~~13, wherein the respective power is equal to one of the first power of the central region and the second power of the peripheral region.

~~30.~~15. The medical device of ~~any one of claims~~claim 1~~ to 25~~, further comprising an external region surrounding the peripheral region.

~~31.~~16. The medical device of claim ~~30~~15, further comprising a transition region comprised between the peripheral region and the external region, a width of the transition region being at most equal to about 1.5 mm.

~~32.~~17. The medical device of claim ~~30 or 31~~15, wherein the external region comprises a plurality of angular sections each having a respective power, and wherein two adjacent ones of the plurality of angular sections are provided with different powers.

~~33.~~18. The medical device of claim ~~32, wherein two adjacent ones of the plurality of angular sections are provided with different powers.~~

~~34. The medical device of claim 33~~17, wherein the respective power is equal to one of the first power of the central region and the second power of the peripheral region.

~~35.~~19. The medical device of ~~any one of claims 33 to 34~~claim 17, wherein the external region is divided into an even number of said angular sections.

~~36.~~20. The medical device of ~~any one of claims~~claim 1~~ to 29~~, wherein the medical device is a corrective lens~~.~~

~~37. The medical device of claim 36, wherein,~~ the corrective lens ~~is~~being one of a contact lens~~.~~

~~38. The medical device of claim 37, wherein the contact lens is a soft contact lens.~~

~~39. The medical device of claim 37, wherein the contact lens is one of a rigid lens, a gas permeable lens~~ and ~~a hybrid lens.~~

~~40. The medical device of claim 36, wherein the corrective lens is~~ an intraocular lens.

~~41. A medical device for management of an axial length growth of an eye of a myopic subject, the eye having a pupil, the device comprising:~~

~~a central region having a first power for adjusting a vision at distance;~~

~~a transition region surrounding the central region and having a width at most equal to 1.5 mm; and~~

~~a peripheral region surrounding the transition region, the peripheral region having a second power,~~

~~wherein a surface area of the central region and the transition region is comprised between about 20% and about 40% of the surface area of the pupil of the eye, and wherein the first power of the central region is comprised between about -0.25 diopter and about -30 diopters.~~

~~42. The medical device of claim 41, wherein the surface area of the pupil of the eye corresponds to a surface area of the pupil of the eye evaluated in photopic condition, when the subject is looking at distance with uncovered eyes.~~

~~43. The medical device of claim 41 or 42, wherein the second power of the peripheral region is determined as a function of a target net power and the first power of the central region.~~

~~44. The medical device of claim 43, wherein the target net power is comprised between about +3.5 diopters and about + 10 diopters, and the second power is comprised between about +3.75 diopters and about +20 diopters.~~

~~45. The medical device of claim 44, wherein the target net power is equal to about +5 diopters.~~

~~46. The medical device of any one of claims 41 to 45, wherein the second power is constant throughout the peripheral region.~~

~~47. The medical device of any one of claims 41 to 45, wherein the peripheral region comprises a plurality of angular sections each having a respective power.~~

~~48. The medical device of claim 47, wherein two adjacent ones of the plurality of angular sections are provided with different powers.~~

~~49. The medical device of claim 48, wherein the respective power is equal to one of the first power of the central region and the second power of the peripheral region.~~

~~50. The medical device of any one of claims 41 to 45, further comprising an external region surrounding the peripheral region.~~

~~51. The medical device of claim 50, further comprising a transition region comprised between the peripheral region and the external region, a width of the transition region being at most equal to about 1.5 mm.~~

~~52. The medical device of claim 50 or 51, wherein the external region comprises a plurality of angular sections each having a respective power.~~

~~53. The medical device of claim 52, wherein two adjacent ones of the plurality of angular sections are provided with different powers.~~

~~54. The medical device of claim 53, wherein the respective power is equal to one of the first power of the central region and the second power of the peripheral region.~~

~~55. The medical device of any one of claims 52 to 54, wherein the external region is divided into an even number of said angular sections.~~

56. The medical device of any one of claims 41 to 55, wherein the medical device is a corrective lens.

57. The medical device of claim 56, wherein the corrective lens is a contact lens.

58. The medical device of claim 57, wherein the contact lens is a soft contact lens.

59. The medical device of claim 57, wherein the contact lens is one of a rigid lens, a gas permeable lens and a hybrid lens.

60. The medical device of claim 56, wherein the corrective lens is an intraocular lens.

61. A method for managing of an axial length growth of an eye of a subject, comprising:

creating a central region within a cornea of the eye of the subject, the central region having a first power;

creating an intermediate region surrounding the central region within the cornea of the eye, the intermediate region having a width at most equal to about 1.5 mm; and

creating a peripheral region surrounding the intermediate region within the cornea of the eye, the peripheral region having a second power,

wherein a surface area of each one of the central and peripheral regions is chosen as a function of a surface area of the pupil of the eye.

62. The method of claim 61, wherein said creating the central, intermediate and peripheral regions comprises propagating a beam of a laser on the cornea of the eye.

63. The method of claim 61 or 62, wherein the central and peripheral regions are adapted to treat at least one of myopia and astigmatism.

64. The method of claim 63, wherein a surface area of the central region and the transition region is comprised between about 20% and about 40% of the surface area of the pupil of the eye.

~~65. The method of claim 64, wherein the first power of the central region is comprised between about -0.25 diopter and about -30 diopters for said myopia and between about -0.258 diopter and about -10 diopters for said astigmatism.~~

~~66. The method of claim 65, wherein the second power of the peripheral region is determined as a function of a target net power and the first power of the central region.~~

~~67. The method of claim 66, wherein the target net power is comprised between about +3.5 diopters and about + 10 diopters, and the second power is comprised between about +3.75 diopters and about +20 diopters.~~

~~68. The method of claim 67, wherein the target net power is equal to about +5 diopters.~~

~~69. The method of claim 61 or 62, wherein the central and peripheral regions are adapted to treat hyperopia.~~

~~70. The method of claim 69, wherein a surface area of the central region and the transition region is comprised between about 30% and about 50% of the surface area of the pupil of the eye.~~

~~71. The method of claim 70, wherein the first power of the central region is comprised between about +0.25 diopter and +25 diopters.~~

~~72. The method of claim 71, wherein the second power of the peripheral region is determined as a function of a target net power and the first power of the central region.~~

~~73. The method of claim 72, wherein the target net power is comprised between about -3.5 diopters and about -10 diopters and the second power of the peripheral region is comprised between about -3.75 diopters and -20 diopters.~~

~~74. The method of claim 73, wherein the target net power of the peripheral region is equal to about -5 diopters.~~

~~75. The method of claim 61 or 62, wherein the central and peripheral regions are adapted to treat presbyopia.~~

~~76. The method of claim 75, wherein a surface area of the central portion and the transition portion is comprised between about 20% and about 30% of the surface area of the pupil of the eye.~~

~~77. The method of claim 76, wherein the first power of the central region is comprised between about -30 diopters and about +25 diopters.~~

~~78. The method of claim 77, wherein the peripheral region is provided with an add-power comprised between about +0.25 diopter and about +5 diopters.~~

~~79. The method of claim 78, wherein the add-power of the peripheral region is equal to about +2.5 diopters.~~

~~80. The method of claim 75, wherein a surface area of the central portion and the transition portion is comprised between about 10% and about 30% of the surface area of the pupil of the eye.~~

~~81. The method of claim 80, wherein the second power of the peripheral region is comprised between about -30 diopters and +25 diopters.~~

~~82. The method of claim 81, wherein the central region is provided with an add-power comprised between about +0.25 diopters and about +5 diopters.~~

~~83. The method of claim 82, wherein the add-power of the central region is equal to about +2.5 diopters.~~

~~84. The method of any one of claims 61 to 83, wherein the second power is constant throughout the peripheral region.~~

85. The method of any one of claims 61 to 83, wherein said creating the peripheral region comprises creating a plurality of angular sections within the peripheral region, each one of the plurality of angular sections having a respective power.

86. The method of claim 85, wherein two adjacent ones of the plurality of angular sections are provided with different powers.

87. The method of claim 86, wherein the respective power is equal to one of the first power of the central region and the second power of the peripheral region.

88. The method of any one of claims 61 to 83, further comprising creating an external region surrounding the peripheral region.

89. The method of claim 88, further comprising creating a transition region comprised between the peripheral region and the external region, a width of the transition region being at most equal to about 1.5 mm.

90. The method of claim 88 or 89, wherein the external region comprises a plurality of angular sections each having a respective power.

91. The method of claim 90, wherein two adjacent ones of the plurality of angular sections are provided with different powers.

92. The method of claim 91, wherein the respective power is equal to one of the first power of the central region and the second power of the peripheral region.

93. The method of any one of claims 90 to 92, wherein the external region is divided into an even number of said angular sections.

94. A method for treating a condition of an eye of a subject, the method comprising:

determining a refractive error of the eye of the subject;

determining and a surface area of a pupil of the eye; and

providing the medical device of any one of claims 1 to 40.

~~95. A method for treating a myopia of an eye of a subject, the method comprising:~~

~~determining that the eye of the subject is affected by the myopia;~~

~~determining and a surface area of a pupil of the eye; and~~

~~providing the medical device of any one of claims 41 to 60.~~