#### SUPPLEMENTARY FIGURES II. Electrophysiology





Figure S22. Standard full-field ERG recording of patient III/3.









Figure S24. mfERG ring analysis of patient III/3, OS.



## **OD Monoc**

Figure S25. Multifocal ERG 3 D colour map of III/3 carrier male right eye displays overall normal central macular function with scarce subnormal responses only.



## **OS Monoc**

Figure S26. Multifocal ERG 3 D colour map of III/3 carrier male, left eye displays overall normal central macular function with scarce subnormal responses only.



Figure S27. PERG recording of patient III/8. Lines 1 and 3 and lines 2 and 4 represent pairs of replicate measurements.



Figure S28. pVEP recording of patient III/8. Lines 1 and 3 display responses to 60' stimuli and lines 2 and 4 represent responses to 15' stimuli.









Figure S30. PERG recording of patient IV/1. Lines 1 and 3 and lines 2 and 4 represent pairs of replicate measurements.

#### **Pattern-VEP**



Figure S31. pVEP recording of patient IV/1. Lines 1 and 3 display responses to 60' stimuli and lines 2 and 4 represent responses to 15' stimuli.

Amplitudes P1(b) Orientation: vertically mirrored

9.9 5.3 5.8 6.0 8.2 8.5  $M_{7,0} M_{10,0} M_{9,5} M_{10,4} M_{4,5}$ 9.5  $M_{42,5} M_{6,1} M_{14,7} M_{22,9} M_{72,3} M_{9,7}$ 11.8  $M_{13,4} M_{4,5} M_{52,4} M_{53,4} M_{55,4} M_{55,4} M_{55,4} M_{7,8} M_{10,1} M_{7,2}$ 6.7  $M_{10,5} M_{25,4} M_{35,7} M_{27,7} M_{18,0} M_{22,8} M_{7,6} M_{6,3}$   $M_{10,5} M_{25,4} M_{25,4} M_{19,1} M_{18,4} M_{10,8} M_{10,8} M_{6,3}$   $M_{10,5} M_{25,4} M_{19,1} M_{19,1} M_{18,4} M_{10,8} M_{10,8} M_{43}$   $M_{10,5} M_{25,4} M_{19,1} M_{19,1} M_{18,4} M_{10,8} M_{10,8} M_{43}$   $M_{10,5} M_{25,4} M_{19,1} M_{19,1} M_{18,4} M_{10,8} M_{10,8} M_{43}$   $M_{10,5} M_{25,4} M_{19,1} M_{15,4} M_{12,4} M_{10,8} M_{12,8} M_{10,8}$   $M_{10,5} M_{20} M_{15,7} M_{22,8} M_{12,4} M_{12,4} M_{12,8} M_{12,8} M_{12,8} M_{12,8}$  $M_{10,6} M_{10,5} M_{10,7} M_{10,6} M_{12,8} M_{12,4} M_{12,4} M_{12,8} M_{12,8} M_{12,8} M_{12,8} M_{12,8} M_{12,4} M_{12,8} M_{12,8} M_{12,8} M_{12,8} M_{12,8} M_{12,4} M_{12,8} M_{12,4} M_{12,8} M_{12,8} M_{12,8} M_{12,8} M_{12,8} M_{12,4} M_{12,8} M_{12,$ 

mp.P1 (nV

1µV

Amp.P1 [nV/

**OD Monoc** 

Figure S32. mfERG recording of patient IV/1, OD.





Figure S34. mfERG ring analysis of patient IV/1, OD.



Figure S36. Multifocal ERG 3 D colour map of patient IV/1, OD



Figure S37. Multifocal ERG 3 D colour map of patient IV/1, OS







Figure S39. PERG recording of patient IV/2. Lines 1 and 3 and lines 2 and 4 represent pairs of replicate measurements.



Figure S40. pVEP recording of patient IV/2. Lines 1 and 3 display responses to 60' stimuli and lines 2 and 4 represent responses to 15' stimuli.



Figure S41. mfERG recording of patient IV/2, OD.



Figure S42. mfERG recording of patient IV/2, OS.



Figure S43. mfERG ring analysis of patient IV/2, OD.



# **OS Monoc**

Figure S44. mfERG ring analysis of patient IV/2, OS.







Figure S45. Standard full-field ERG recording of patient IV/6.



Figure S46. PERG recording of patient IV/6. Lines 1 and 3 and lines 2 and 4 represent pairs of replicate measurements.



# Pattern-VEP

Figure S47. pVEP recording of patient IV/6. Lines 1 and 3 display responses to 60' stimuli and lines 2 and 4 represent responses to 15' stimuli.



Figure S48. mfERG recording of patient IV/6, OD.



Figure S49. mfERG recording of patient IV/6, OS.



Figure S50. mfERG ring analysis of patient IV/6, OD.



#### **OS Monoc**

Figure S51. mfERG ring analysis of patient IV/6, OS.



Figure S52. Multifocal ERG 3 D colour map of patient IV/6 severely myopic affected female right eye displays extensive subnormal responses within the whole central 30 degrees.



Figure S53. Multifocal ERG 3 D colour map of IV/6 severely myopic affected female left eye displays extensive subnormal responses within the whole central 30 degrees.



Figure S54. PERG recording of patient IV/10. Lines 1 and 3 and lines 2 and 4 represent pairs of replicate measurements.



Figure S55. pVEP recording of patient IV/10. Lines 1 and 3 display responses to 60' stimuli and lines 2 and 4 represent responses to 15' stimuli.