Supplementary Table 1. Summary of genes and their clinical correlation

Clinical classes of retinal disorders	Disease inheritable genes*														
Bardet-Biedl syndrome, autosomal recessive	*ARL6*	*BBS1*	*BBS2*	*BBS4*	*BBS5*	*BBS7*	*BBS9*	*BBS10*	*BBS12*	*CEP290*	*INPP5E*	*MKKS*	*MKS1*	*TRIM32*	*TTC8*	
Chorioretinal atrophy or degeneration autosomal dominant	*RGR*	*TEAD1*														
Cone or cone-rod dystrophy, autosomal dominant	*AIPL1*	*CRX*	*GUCA1A*	*GUCY2D*	*PITPNM3*	*PROM1*	*PRPH2*	*RIMS1*	*SEMA4A*	*UNC119*						
Cone or cone-rod dystrophy, autosomal recessive	*ABCA4*	*ADAM9*	*CACNA2D4*	*CDHR1*	*CERKL*	*CNGB3*	*KCNV2*	*PDE6C*	*RAX2*	*RDH5*	*RPGRIP1*					
Cone or cone-rod dystrophy, X-linked	*CACNA1F*	*RPGR*														
Congenital stationary night blindness, autosomal dominant	*GNAT1*	*PDE6B*	*RHO*													
Congenital stationary night blindness, autosomal recessive	*CABP4*	*GRK1*	*GRM6*	*RDH5*	*SAG*	*SLC24A1*	*TRPM1*									
Congenital stationary night blindness, X-linked	*CACNA1F*	*NYX*														
Deafness alone or syndromic, autosomal dominant	*WFS1*															
Deafness alone or syndromic, autosomal recessive	*CDH23*	*DFNB31*	*MYO7A*	*PCDH15*	*PDZD7*	*USH1C*										
Leber congenital amaurosis, autosomal dominant	*CRX*	*IMPDH1*	*OTX2*													
Leber congenital amaurosis, autosomal recessive	*AIPL1*	*CABP4*	*CEP290*	*CRB1*	*CRX*	*GUCY2D*	*IQCB1*	*LCA5*	*LRAT*	*RD3*	*RDH12*	*RPE65*	*RPGRIP1*	*SPATA7*	*TULP1*	
Macular degeneration, autosomal dominant	*BEST1*	*C1QTNF5*	*EFEMP1*	*ELOVL4*	*FSCN2*	*GUCA1B*	*HMCN1*	*PROM1*	*PRPH2*	*RP1L1*	*TIMP3*					
Macular degeneration, autosomal recessive	*ABCA4*	*CFH*														
Macular degeneration, X-linked	*RPGR*															
Ocular-retinal developmental disease, autosomal dominant	*VCAN*															
Optic atrophy, autosomal dominant	*OPA1*															
Optic atrophy, autosomal recessive	*TMEM126A*															
Optic atrophy, X-linked	*TIMM8A*															
Retinitis pigmentosa, autosomal dominant	*BEST1*	*CA4*	*CRX*	*FSCN2*	*GUCA1B*	*IMPDH1*	*KLHL7*	*NR2E3*	*NRL*	*PRPF3*	*PRPF8*	*PRPF31*	*PRPH2*	*RDH12*	*RHO*	
	ROM1	*RP1*	*RP9*	*SEMA4A*	*SNRNP200*	*TOPORS*										
Retinitis pigmentosa, autosomal recessive	*ABCA4*	*BEST1*	*C2ORF71*	*CERKL*	*CLRN1*	*CNGA1*	*CNGB1*	*CRB1*	*DHDDS*	*EYS*	*FAM161A*	*IDH3B*	*IMPG2*	*LRAT*	*MERTK*	
	NR2E3	*NRL*	*PDE6A*	*PDE6B*	*PDE6G*	*PRCD*	*PROM1*	*RBP3*	*RGR*	*RHO*	*RLBP1*	*RP1*	*RPE65*	*SAG*	*SPATA7*	
	TTC8	*TULP1*	*USH2A*	*ZNF513*												
Retinitis pigmentosa, X-linked	*RP2*	*RPGR*														
Syndromic/systemic diseases with retinopathy, autosomal dominant	*ABCC6*	*ATXN7*	*COL11A1*	*COL2A1*	*JAG1*	*KCNJ13*	*PAX2*	*TREX1*	*VCAN*							
Syndromic/systemic diseases with retinopathy, autosomal recessive	*ABCC6*	*AHI1*	*ALMS1*	*CC2D2A*	*CEP290*	*CLN3*	*COL9A1*	*FLVCR1*	*INPP5E*	*INVS*	*IQCB1*	*LRP5*	*MKS1*	*MTTP*	*NPHP1*	
	NPHP3	*NPHP4*	*OPA3*	*PANK2*	*PEX1*	*PEX7*	*PHYH*	*PXMP3*	*RPGRIP1L*	*SDCCAG8*	*TTPA*	*WFS1*				
Syndromic/systemic diseases with retinopathy, X-linked	*OFD1*	*TIMM8A*														
Usher syndrome, autosomal recessive	*CDH23*	*CLRN1*	*DFNB31*	*GPR98*	*MYO7A*	*PCDH15*	*USH1C*	*USH1G*	*USH2A*							
Other retinopathy, autosomal dominant	*BEST1*	*CRB1*	*FZD4*	*LRP5*	*OPN1SW*	*RB1*	*TSPAN12*									
Other retinopathy, autosomal recessive	*BEST1*	*CDH3*	*CNGA3*	*CNGB3*	*CNNM4*	*CYP4V2*	*GNAT2*	*LRP5*	*MFRP*	*NR2E3*	*OAT*	*PROM1*	*RBP4*	*RGS9*	*RGS9BP*	RLBP1
Other retinopathy, X-linked	*CACNA1F*	*CHM*	*DMD*	*NDP*	*OPN1LW*	*OPN1MW*	*PGK1*	*RS1*								
Eye development related genes	*PAX6*	*CHD7*	*TMEM67*	*MKS1*	*HMX1*	*GDF6*	*GDF5*	*BMP4*	*BMP7*	*VSX2*	*MITF*	*NLZ1*	*NLZ2*			
Pigmentation genes	*TYR*	*OCA2*	*TYRP1*	*SLC45A2*	*SLC24A4*	*ASIP*	*MC1R*									

Note: *Some of the genes appeared in two or more classes of disorders.