

References - Development and Progression of AMD

1. Miller JW. Age-related macular degeneration revisited--piecing the puzzle: the LXIX Edward Jackson memorial lecture. *Am J Ophthalmol* 2013;155:1-35 e13.
2. Wong WL, Su X, Li X, et al. Global prevalence of age-related macular degeneration and disease burden projection for 2020 and 2040: a systematic review and meta-analysis. *Lancet Glob Health* 2014;2:e106-16.
3. Green WR, Enger C. Age-related macular degeneration histopathologic studies: the 1992 Lorenz E. Zimmerman Lecture. 1992. *Retina* 2005;25:1519-35.
4. Bressler NM, Silva JC, Bressler SB, Fine SL, Green WR. Clinicopathologic correlation of drusen and retinal pigment epithelial abnormalities in age-related macular degeneration. 1994. *Retina* 2005;25:130-42.
5. Seddon JM, Francis PJ, George S, Schultz DW, Rosner B, Klein ML. Association of CFH Y402H and LOC387715 A69S with progression of age-related macular degeneration. *JAMA* 2007;297:1793-800.
6. Schwartz SG, Hampton BM, Kovach JL, Brantley MA, Jr. Genetics and age-related macular degeneration: a practical review for the clinician. *Clin Ophthalmol* 2016;10:1229-35.
7. Klein RJ, Zeiss C, Chew EY, et al. Complement factor H polymorphism in age-related macular degeneration. *Science* 2005;308:385-9.
8. Fisher SA, Abecasis GR, Yashar BM, et al. Meta-analysis of genome scans of age-related macular degeneration. *Hum Mol Genet* 2005;14:2257-64.
9. Majewski J, Schultz DW, Weleber RG, et al. Age-related macular degeneration--a genome scan in extended families. *Am J Hum Genet* 2003;73:540-50.
10. Skerka C, Chen Q, Fremeaux-Bacchi V, Roumenina LT. Complement factor H related proteins (CFHRs). *Mol Immunol* 2013;56:170-80.
11. Rodriguez de Cordoba S, Esparza-Gordillo J, Goicoechea de Jorge E, Lopez-Trascasa M, Sanchez-Corral P. The human complement factor H: functional roles, genetic variations and disease associations. *Mol Immunol* 2004;41:355-67.
12. Hageman GS, Anderson DH, Johnson LV, et al. A common haplotype in the complement regulatory gene factor H (HF1/CFH) predisposes individuals to age-related macular degeneration. *Proc Natl Acad Sci U S A* 2005;102:7227-32.
13. Haines JL, Hauser MA, Schmidt S, et al. Complement factor H variant increases the risk of age-related macular degeneration. *Science* 2005;308:419-21.
14. Tuo J, Ning B, Bojanowski CM, et al. Synergic effect of polymorphisms in ERCC6 5' flanking region and complement factor H on age-related macular degeneration predisposition. *Proc Natl Acad Sci U S A* 2006;103:9256-61.
15. Okamoto H, Umeda S, Obazawa M, et al. Complement factor H polymorphisms in Japanese population with age-related macular degeneration. *Mol Vis* 2006;12:156-8.
16. Chen LJ, Liu DT, Tam PO, et al. Association of complement factor H polymorphisms with exudative age-related macular degeneration. *Mol Vis* 2006;12:1536-42.
17. Wegscheider BJ, Weger M, Renner W, et al. Association of complement factor H Y402H gene polymorphism with different subtypes of exudative age-related macular degeneration. *Ophthalmology* 2007;114:738-42.
18. Weismann D, Hartvigs K, Lauer N, et al. Complement factor H binds malondialdehyde epitopes and protects from oxidative stress. *Nature* 2011;478:76-81.
19. Hughes AE, Orr N, Esfandiary H, Diaz-Torres M, Goodship T, Chakravarthy U. A common CFH haplotype, with deletion of CFHR1 and CFHR3, is associated with lower risk of age-related macular degeneration. *Nat Genet* 2006;38:1173-7.

20. Wang L, Clark ME, Crossman DK, et al. Abundant lipid and protein components of drusen. *PLoS One* 2010;5:e10329.
21. Hageman GS, Luthert PJ, Victor Chong NH, Johnson LV, Anderson DH, Mullins RF. An integrated hypothesis that considers drusen as biomarkers of immune-mediated processes at the RPE-Bruch's membrane interface in aging and age-related macular degeneration. *Prog Retin Eye Res* 2001;20:705-32.
22. Colak E, Majkic-Singh N, Zoric L, Radosavljevic A, Kosanovic-Jakovic N. The role of CRP and inflammation in the pathogenesis of age-related macular degeneration. *Biochem Med (Zagreb)* 2012;22:39-48.
23. Roth F, Bindewald A, Holz FG. Keypathophysiologic pathways in age-related macular disease. *Graefes Arch Clin Exp Ophthalmol* 2004;242:710-6.
24. Grossniklaus HE, Cingle KA, Yoon YD, Ketkar N, L'Hernault N, Brown S. Correlation of histologic 2-dimensional reconstruction and confocal scanning laser microscopic imaging of choroidal neovascularization in eyes with age-related maculopathy. *Arch Ophthalmol* 2000;118:625-9.
25. Ridker PM. From C-Reactive Protein to Interleukin-6 to Interleukin-1: Moving Upstream To Identify Novel Targets for Atheroprotection. *Circ Res* 2016;118:145-56.
26. Lange LA, Carlson CS, Hindorff LA, et al. Association of polymorphisms in the CRP gene with circulating C-reactive protein levels and cardiovascular events. *JAMA* 2006;296:2703-11.
27. Yim-Lui Cheung C, Wong TY, Lamoureux EL, et al. C-reactive protein and retinal microvascular caliber in a multiethnic asian population. *Am J Epidemiol* 2010;171:206-13.
28. Hong T, Tan AG, Mitchell P, Wang JJ. A review and meta-analysis of the association between C-reactive protein and age-related macular degeneration. *Surv Ophthalmol* 2011;56:184-94.
29. Schaumberg DA, Christen WG, Kozlowski P, Miller DT, Ridker PM, Zee RY. A prospective assessment of the Y402H variant in complement factor H, genetic variants in C-reactive protein, and risk of age-related macular degeneration. *Invest Ophthalmol Vis Sci* 2006;47:2336-40.
30. Scholl HP, Charbel Issa P, Walier M, et al. Systemic complement activation in age-related macular degeneration. *PLoS One* 2008;3:e2593.
31. Tzeng HE, Tsai CH, Chang ZL, et al. Interleukin-6 induces vascular endothelial growth factor expression and promotes angiogenesis through apoptosis signal-regulating kinase 1 in human osteosarcoma. *Biochem Pharmacol* 2013;85:531-40.
32. Seddon JM, George S, Rosner B, Rifai N. Progression of age-related macular degeneration: prospective assessment of C-reactive protein, interleukin 6, and other cardiovascular biomarkers. *Arch Ophthalmol* 2005;123:774-82.
33. zumi-Nagai K, Nagai N, Ozawa Y, et al. Interleukin-6 receptor-mediated activation of signal transducer and activator of transcription-3 (STAT3) promotes choroidal neovascularization. *Am J Pathol* 2007;170:2149-58.
34. Chalam KV, Grover S, Sambhav K, Balaiya S, Murthy RK. Aqueous interleukin-6 levels are superior to vascular endothelial growth factor in predicting therapeutic response to bevacizumab in age-related macular degeneration. *J Ophthalmol* 2014;2014:502174.
35. Ridker PM. Clinical application of C-reactive protein for cardiovascular disease detection and prevention. *Circulation* 2003;107:363-9.
36. Lip PL, Blann AD, Hope-Ross M, Gibson JM, Lip GY. Age-related macular degeneration is associated with increased vascular endothelial growth factor, hemorheology and endothelial dysfunction. *Ophthalmology* 2001;108:705-10.
37. Smith W, Mitchell P, Leeder SR, Wang JJ. Plasma fibrinogen levels, other cardiovascular risk factors, and age-related maculopathy: the Blue Mountains Eye Study. *Arch Ophthalmol* 1998;116:583-7.
38. Klein R, Klein BE, Knudtson MD, Wong TY, Shankar A, Tsai MY. Systemic markers of inflammation, endothelial dysfunction, and age-related maculopathy. *Am J Ophthalmol* 2005;140:35-44.
39. Colak E, Ignjatovic S, Radosavljevic A, Zoric L. The association of enzymatic and non-enzymatic

- antioxidant defense parameters with inflammatory markers in patients with exudative form of age-related macular degeneration. *J Clin Biochem Nutr* 2017;60:100-7.
40. Joachim N, Mitchell P, Kifley A, Rochtchina E, Hong T, Wang JJ. Incidence and progression of geographic atrophy: observations from a population-based cohort. *Ophthalmology* 2013;120:2042-50.
 41. Nathoo NA, Or C, Young M, et al. Optical coherence tomography-based measurement of drusen load predicts development of advanced age-related macular degeneration. *Am J Ophthalmol* 2014;158:757-61 e1.
 42. Bressler NM, Bressler SB, Seddon JM, Gragoudas ES, Jacobson LP. Drusen characteristics in patients with exudative versus non-exudative age-related macular degeneration. *Retina* 1988;8:109-14.
 43. Ferris FL, Davis MD, Clemons TE, et al. A simplified severity scale for age-related macular degeneration: AREDS Report No. 18. *Arch Ophthalmol* 2005;123:1570-4.
 44. Mimoun G, Soubrane G, Coscas G. [Macular drusen]. *J Fr Ophtalmol* 1990;13:511-30.
 45. Klein R, Meuer SM, Knudtson MD, Iyengar SK, Klein BE. The epidemiology of retinal reticular drusen. *Am J Ophthalmol* 2008;145:317-26.
 46. Joachim N, Mitchell P, Rochtchina E, Tan AG, Wang JJ. Incidence and progression of reticular drusen in age-related macular degeneration: findings from an older Australian cohort. *Ophthalmology* 2014;121:917-25.
 47. Finger RP, Wu Z, Luu CD, et al. Reticular pseudodrusen: a risk factor for geographic atrophy in fellow eyes of individuals with unilateral choroidal neovascularization. *Ophthalmology* 2014;121:1252-6.
 48. Gil JQ, Marques JP, Hogg R, et al. Clinical features and long-term progression of reticular pseudodrusen in age-related macular degeneration: findings from a multicenter cohort. *Eye (Lond)* 2017;31:364-71.
 49. Pumariega NM, Smith RT, Sohrab MA, Letien V, Souied EH. A prospective study of reticular macular disease. *Ophthalmology* 2011;118:1619-25.
 50. Solbach U, Keilhauer C, Knabben H, Wolf S. Imaging of retinal autofluorescence in patients with age-related macular degeneration. *Retina* 1997;17:385-9.
 51. Boulton M, Dayhaw-Barker P. The role of the retinal pigment epithelium: topographical variation and ageing changes. *Eye (Lond)* 2001;15:384-9.
 52. von Ruckmann A, Fitzke FW, Bird AC. Fundus autofluorescence in age-related macular disease imaged with a laser scanning ophthalmoscope. *Invest Ophthalmol Vis Sci* 1997;38:478-86.
 53. Schmitz-Valckenberg S, Bindewald-Wittich A, Dolar-Szczasny J, et al. Correlation between the area of increased autofluorescence surrounding geographic atrophy and disease progression in patients with AMD. *Invest Ophthalmol Vis Sci* 2006;47:2648-54.
 54. Jeong YJ, Hong IH, Chung JK, Kim KL, Kim HK, Park SP. Predictors for the progression of geographic atrophy in patients with age-related macular degeneration: fundus autofluorescence study with modified fundus camera. *Eye (Lond)* 2014;28:209-18.
 55. Holz FG, Bindewald-Wittich A, Fleckenstein M, et al. Progression of geographic atrophy and impact of fundus autofluorescence patterns in age-related macular degeneration. *Am J Ophthalmol* 2007;143:463-72.
 56. Complications of Age-related Macular Degeneration Prevention Trial Research G. Risk factors for choroidal neovascularization and geographic atrophy in the complications of age-related macular degeneration prevention trial. *Ophthalmology* 2008;115:1474-9, 9 e1-6.
 57. Yehoshua Z, Rosenfeld PJ, Gregori G, et al. Progression of geographic atrophy in age-related macular degeneration imaged with spectral domain optical coherence tomography. *Ophthalmology* 2011;118:679-86.
 58. Zweifel SA, Spaide RF, Curcio CA, Malek G, Imamura Y. Reticular pseudodrusen are subretinal drusenoid deposits. *Ophthalmology* 2010;117:303-12 e1.

[View PDF](#)