

References - Angiogenesis

1. Gariano RF, Gardner TW. Retinal angiogenesis in development and disease. *Nature* 2005;438(7070):960-6.
2. Costa C, Incio J, Soares R. Angiogenesis and chronic inflammation: cause or consequence? *Angiogenesis* 2007;10(3):149-66.
3. Ferrara N, Kerbel RS. Angiogenesis as a therapeutic target. *Nature* 2005;438(7070):967-74.
4. Yancopoulos GD, Davis S, Gale NW, et al. Vascular-specific growth factors and blood vessel formation. *Nature* 2000;407(6801):242-8.
5. Presta M, Dell'Era P, Mitola S, et al. Fibroblast growth factor/fibroblast growth factor receptor system in angiogenesis. *Cytokine Growth Factor Rev* 2005;16(2):159-78.
6. Miyazono K, Usuki K, Heldin CH. Platelet-derived endothelial cell growth factor. *Prog Growth Factor Res* 1991;3(3):207-17.
7. Luttun A, Tjwa M, Carmeliet P. Placental growth factor (PIGF) and its receptor Flt-1 (VEGFR-1): novel therapeutic targets for angiogenic disorders. *Ann N Y Acad Sci* 2002;979:80-93.
8. Ferrara N, Gerber HP, LeCouter J. The biology of VEGF and its receptors. *Nat Med* 2003;9(6):669-76.
9. Ohnishi T, Daikuhara Y. Hepatocyte growth factor/scatter factor in development, inflammation and carcinogenesis: its expression and role in oral tissues. *Arch Oral Biol* 2003;48(12):797-804.
10. Ferrara N, Damico L, Shams N, et al. Development of ranibizumab, an anti-vascular endothelial growth factor antigen binding fragment, as therapy for neovascular age-related macular degeneration. *Retina* 2006;26(8):859-70.
11. Ferrara N, Mass RD, Campa C, et al. Targeting VEGF-A to treat cancer and age-related macular degeneration. *Annu Rev Med* 2007;58:491-504.
12. Saharinen P, Eklund L, Pulkki K, et al. VEGF and angiopoietin signaling in tumor angiogenesis and metastasis. *Trends Mol Med* 2011;17(7):347-62.

13. Costa C, Soares R, Reis-Filho JS, et al. Cyclo-oxygenase 2 expression is associated with angiogenesis and lymph node metastasis in human breast cancer. *J Clin Pathol* 2002;55(6):429-34.
14. Ezekowitz RA, Mulliken JB, Folkman J. Interferon alfa-2a therapy for life-threatening hemangiomas of infancy. *N Engl J Med* 1992;326(22):1456-63.
15. Tolsma SS, Volpert OV, Good DJ, et al. Peptides derived from two separate domains of the matrix protein thrombospondin-1 have anti-angiogenic activity. *J Cell Biol* 1993;122(2):497-511.
16. O'Reilly MS, Boehm T, Shing Y, et al. Endostatin: an endogenous inhibitor of angiogenesis and tumor growth. *Cell* 1997;88(2):277-85.
17. O'Reilly MS, Holmgren L, Shing Y, et al. Angiostatin: a novel angiogenesis inhibitor that mediates the suppression of metastases by a Lewis lung carcinoma. *Cell* 1994;79(2):315-28.
18. Dawson DW, Volpert OV, Gillis P, et al. Pigment epithelium-derived factor: a potent inhibitor of angiogenesis. *Science* 1999;285(5425):245-8.
19. Dorrell M, Uusitalo-Jarvinen H, Aguilar E, et al. Ocular neovascularization: basic mechanisms and therapeutic advances. *Surv Ophthalmol* 2007;52 Suppl 1:S3-19.
20. Wang H, Hartnett ME. Regulation of signaling events involved in the pathophysiology of neovascular AMD. *Mol Vis* 2016;22:189-202.
21. Berber P, Grassmann F, Kiel C, et al. An Eye on Age-Related Macular Degeneration: The Role of MicroRNAs in Disease Pathology. *Mol Diagn Ther* 2017;21(1):31-43.
22. Augustin HG, Koh GY, Thurston G, et al. Control of vascular morphogenesis and homeostasis through the angiopoietin-Tie system. *Nat Rev Mol Cell Biol* 2009;10(3):165-77.
23. Sadiq MA, Hanout M, Sarwar S, et al. Platelet-Derived Growth Factor Inhibitors: A Potential Therapeutic Approach for Ocular Neovascularization. *Dev Ophthalmol* 2016;55:310-6.
24. Kim YW, West XZ, Byzova TV. Inflammation and oxidative stress in angiogenesis and vascular disease. *J Mol Med (Berl)* 2013;91(3):323-8.
25. Gariano RF. Cellular mechanisms in retinal vascular development. *Prog Retin Eye Res* 2003;22(3):295-306.

26. Chan-Ling T, McLeod DS, Hughes S, et al. Astrocyte-endothelial cell relationships during human retinal vascular development. *Invest Ophthalmol Vis Sci* 2004;45(6):2020-32.
27. Lutty GA, Chan-Ling T, Phelps DL, et al. Proceedings of the Third International Symposium on Retinopathy of Prematurity: an update on ROP from the lab to the nursery (November 2003, Anaheim, California). *Mol Vis* 2006;12:532-80.
28. Hughes S, Yang H, Chan-Ling T. Vascularization of the human fetal retina: roles of vasculogenesis and angiogenesis. *Invest Ophthalmol Vis Sci* 2000;41(5):1217-28.
29. Chan-Ling T, Gock B, Stone J. The effect of oxygen on vasoformative cell division. Evidence that 'physiological hypoxia' is the stimulus for normal retinal vasculogenesis. *Invest Ophthalmol Vis Sci* 1995;36(7):1201-14.
30. Cunha-Vaz JG. The blood-retinal barriers system. Basic concepts and clinical evaluation. *Exp Eye Res* 2004;78(3):715-21.
31. Eichler W, Yafai Y, Wiedemann P, et al. Antineovascular agents in the treatment of eye diseases. *Curr Pharm Des* 2006;12(21):2645-60.
32. Gao F, Hou H, Liang H, et al. Bone marrow-derived cells in ocular neovascularization: contribution and mechanisms. *Angiogenesis* 2016;19(2):107-18.
33. Bird AC, Bressler NM, Bressler SB, et al. An international classification and grading system for age-related maculopathy and age-related macular degeneration. The International ARM Epidemiological Study Group. *Surv Ophthalmol* 1995;39(5):367-74.
34. Hogg RE, Chakravarthy U. Visual function and dysfunction in early and late age-related maculopathy. *Prog Retin Eye Res* 2006;25(3):249-76.
35. de Jong PT. Age-related macular degeneration. *N Engl J Med* 2006;355(14):1474-85.
36. Andreoli CM, Miller JW. Anti-vascular endothelial growth factor therapy for ocular neovascular disease. *Curr Opin Ophthalmol* 2007;18(6):502-8.
37. Shibuya M. Structure and function of VEGF/VEGF-receptor system involved in angiogenesis. *Cell Struct Funct* 2001;26(1):25-35.
38. Ng EW, Adamis AP. Targeting angiogenesis, the underlying disorder in neovascular age-related macular degeneration. *Can J Ophthalmol* 2005;40(3):352-68.

39. Semenza GL. Vasculogenesis, angiogenesis, and arteriogenesis: mechanisms of blood vessel formation and remodeling. *J Cell Biochem* 2007;102(4):840-7.
40. Thornton J, Edwards R, Mitchell P, et al. Smoking and age-related macular degeneration: a review of association. *Eye* 2005;19(9):935-44.
41. Seddon JM, Francis PJ, George S, et al. Association of CFH Y402H and LOC387715 A69S with progression of age-related macular degeneration. *JAMA* 2007;297(16):1793-800.
42. Gass JDM. Stereoscopic atlas of macular diseases : diagnosis and treatment. 4th ed. St. Louis; Mosby 1997.
43. Grossniklaus HE, Green WR. Choroidal neovascularization. *Am J Ophthalmol* 2004;137(3):496-503.
44. Grossniklaus HE, Gass JD. Clinicopathologic correlations of surgically excised type 1 and type 2 submacular choroidal neovascular membranes. *Am J Ophthalmol* 1998;126(1):59-69.
45. Yannuzzi LA, Freund KB, Takahashi BS. Review of retinal angiomatic proliferation or type 3 neovascularization. *Retina* 2008;28(3):375-84.
46. Lopez PF, Sippy BD, Lambert HM, et al. Transdifferentiated retinal pigment epithelial cells are immunoreactive for vascular endothelial growth factor in surgically excised age-related macular degeneration-related choroidal neovascular membranes. *Invest Ophthalmol Vis Sci* 1996;37(5):855-68.
47. Wang J, Ohno-Matsui K, Yoshida T, et al. Amyloid-beta up-regulates complement factor B in retinal pigment epithelial cells through cytokines released from recruited macrophages/microglia: Another mechanism of complement activation in age-related macular degeneration. *J Cell Physiol* 2009;220(1):119-28.
48. Oh H, Takagi H, Takagi C, et al. The potential angiogenic role of macrophages in the formation of choroidal neovascular membranes. *Invest Ophthalmol Vis Sci* 1999;40(9):1891-8.
49. Steen B, Sejersen S, Berglin L, et al. Matrix metalloproteinases and metalloproteinase inhibitors in choroidal neovascular membranes. *Invest Ophthalmol Vis Sci* 1998;39(11):2194-200.
50. Otani A, Takagi H, Oh H, et al. Expressions of angiopoietins and Tie2 in human choroidal neovascular membranes. *Invest Ophthalmol Vis Sci* 1999;40(9):1912-20.

51. Amin R, Puklin JE, Frank RN. Growth factor localization in choroidal neovascular membranes of age-related macular degeneration. *Invest Ophthalmol Vis Sci* 1994;35(8):3178-88.
52. Ogata N, Yamamoto C, Miyashiro M, et al. Expression of transforming growth factor-beta mRNA in experimental choroidal neovascularization. *Curr Eye Res* 1997;16(1):9-18.
53. Hangai M, Murata T, Miyawaki N, et al. Angiopoietin-1 upregulation by vascular endothelial growth factor in human retinal pigment epithelial cells. *Invest Ophthalmol Vis Sci* 2001;42(7):1617-25.
54. Ishikawa K, Kannan R, Hinton DR. Molecular mechanisms of subretinal fibrosis in age-related macular degeneration. *Exp Eye Res* 2016;142:19-25.

[View PDF](#)