This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Age-related macular degeneration (AMD); diabetic retinopathy; psoriasis; rheumatoid arthritis (RA)	VEGF-A; tumor necrosis factor-α (TNF-α)	Studies in mice suggest that a chimeric decoy receptor against VEGF-A and TNF-α called Valpha could help treat retinopathies and autoimmune diseases. In a mouse model of AMD and diabetic retinopathy, Valpha decreased disease-associated neovascularization similarly to VEGF Trap or Enbrel etanercept. In a mouse model of psoriasis, Valpha lowered disease-associated edema and angiogenesis compared with Enbrel plus VEGF Trap. In a mouse model of RA, Valpha produced reductions in disease severity that were similar to those created by Enbrel and VEGF Trap. Next steps include seeking an industry partner and moving Valpha into clinical testing for severe retinopathy. VEGF Trap, a fusion protein containing the extracellular domains from two VEGF receptors linked to the Fc portion of human IgG from Regeneron Pharmaceuticals Inc. and sanofi-aventis Group, is in Phase III testing to treat multiple cancers. VEGF Trap-Eye from Regeneron and Bayer AG is under review for wet AMD. Enbrel, a recombinant p75 TNF receptor linked to the Fc portion of human IgG1 (TNFr:Fc) from Amgen Inc., Pfizer Inc. and Takeda Pharmaceutical Co. Ltd., is marketed to treat multiple autoimmune diseases including psoriasis and RA.	Patent pending covering Valpha; available for licensing	Jung, K. *et al. J. Biol. Cell*; published online Feb. 23, 2011; doi:10.1074/jbc.M111.228130 **Contact:** Gou Young Koh, Korea Advanced Institute of Science and Technology, Daejeon, South Korea e-mail: gykoh@kaist.ac.kr

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