This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Systemic lupus erythematosus (SLE)	Toll-like receptor 7 (TLR7); TLR9	A study in mice and humans suggests that TLR7 and TLR9 inhibitors could be useful for reducing the dosage of glucocorticoids used to treat SLE. In lupus mouse models and in samples from lupus patients, disease-associated proinflammatory plasmacytoid dendritic cells were more resistant to glucocorticoids in the presence of TLR7 and TLR9 activation than in the absence of their activation. Also in lupus mice, glucocorticoids plus a dual TLR7 and TLR9 inhibitor led to lower resistance to glucocorticoids and greater plasmacytoid dendritic cell death than glucocorticoids alone. Next steps include studying a TLR7 and TLR9 dual antagonist in a Phase I trial to treat lupus. DV1179, a dual TLR7 and TLR9 antagonist from Dynavax Technologies Corp., is in preclinical development to treat lupus and other autoimmune diseases. CPG-52364, a TLR7, TLR8 and TLR9 antagonist from Pfizer Inc., is in Phase I testing to treat SLE. IMO-3100, a dual TLR7 and TLR9 antagonist from Idera Pharmaceuticals Inc., is in preclinical development for SLE.	Patent application covering paper's findings filed by Dynavax; GlaxoSmithKline plc has option to exclusively license IP	Guiducci, C. *et al. Nature*; published online June 17, 2010; doi:10.1038/nature09102 **Contact:** Franck J. Barrat, Dynavax Technologies Corp., Berkeley, Calif. e-mail: fbarrat@dynavax.com

SciBX 3(25); doi:10.1038/scibx.2010.757
Published online June 24, 2010