

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune Disease				
Multiple sclerosis (MS)	Interferon- β (IFN- β); major histocompatibility complex, class II, DR- β 1 (HLA-DRB1)	A genetic analysis of subjects with MS suggests that the <i>HLA-DRB1*0401</i> and <i>HLA-DRB1*0408</i> alleles may predict poor outcome of IFN- β therapy in MS. Patients on long-term IFN- β therapy who carried the <i>HLA-DRB1*0401</i> or <i>HLA-DRB1*0408</i> allele had, respectively, a 5- and 14-fold increased risk of developing antibodies to IFN- β compared with control patients not carrying the alleles ($p < 0.01$). Furthermore, antibody neutralizing activity was significantly increased in the sera of <i>HLA-DRB1*0401</i> - and <i>HLA-DRB1*0408</i> -positive patients compared with patients negative for these alleles ($p = 0.003$). Next steps include investigating whether IFN- β formulations with higher immunogenicity are more strongly affected by the HLA haplotype than formulations with low immunogenicity.	Not patented; unavailable for licensing	Hoffmann, S. <i>et al. Am. J. Hum. Genet.</i> ; published online July 24, 2008; doi:10.1016/j.ajhg.2008.07.006 Contact: Bernhard Hemmer, Technische Universität München, Munich, Germany e-mail: hemmer@lrz.tu-muenchen.de