### **RESEARCH HIGHLIGHTS**

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doi:10.1038/nrgastro.2014.139

# **IN BRIEF**

#### **COELIAC DISEASE**

## HLA haplotype DR3-DQ2 confers a high risk of coeliac disease autoimmunity and coeliac disease in early childhood

Liu *et al.* prospectively followed 6,403 children who had the HLA haplotype DR3–DQ2 or DR4–DQ8 from birth. HLA haplotype DR3–DQ2 conferred a high risk of developing coeliac disease autoimmunity and coeliac disease in early childhood, particularly in those children who were homozygous. The risk of coeliac disease was highest in Sweden (compared with Finland, Germany and the USA), which the authors say highlights the importance of also studying environmental factors.

Original article Liu, E. et al. Risk of pediatric celiac disease according to HLA haplotype and country. N. Engl. J. Med. **371**, 42–49 (2014)

#### NAFLD

### Single nucleotide polymorphism in *TM6SF2* is clinically relevant to progression of hepatic fibrosis in NAFLD

New research from Anstee and colleagues has confirmed that a common nonsynonymous single nucleotide polymorphism in *TM6SF2* (rs58542926 c.449 C>T, Glu167Lys) is associated with NAFLD and causally related to a signal assigned to *NCAN* on chromomose 19 by a genome-wide association study. By looking at two cohorts that included histologically characterized steatosis, steatohepatitis, fibrosis and cirrhosis, they have also established a new association between the *TM6SF2* polymorphism and hepatic fibrogenesis.

Original article Liu, Y.-L. et al. TM6SF2 rs58542926 influences hepatic fibrosis progression in patients with non-alcoholic fatty liver disease. Nat. Commun. 5, 4309 (2014)

#### LIVER TRANSPLANTATION

### Wait-list time and drop-out rate for patients with hepatitis C is not increased by restricting donor age

Fibrosis severity and graft loss in liver transplant recipients with hepatitis C are associated with older donor age. In their cohort study, which spanned three eras of donor age policies, Flemming *et al.* investigated the effect of restricting donor liver age for recipients with hepatitis C (to 30 years versus 48 years for recipients without hepatitis C). Donor age restriction had no obvious adverse effect on wait-list time or early post-transplantation survival.

Original article Flemming, J. A. *et al.* Restricting liver transplant recipients to younger donors does not increase wait-list time or drop out rate: the hepatitis C experience. *Liver Transpl.* doi:10.1002/lt.23937

#### **OESOPHAGEAL DISEASE**

### HLA-DQ variants implicate immune-mediated processes in the pathophysiology of idiopathic achalasia

A genetic association study of 1,068 cases and 4,242 controls has revealed that an insertion of eight residues in HLA-DQ $\beta$ 1 (at position 227–234) and amino acid substitutions in HLA-DQ $\alpha$ 1 (at position 41) and HLA-DQ $\beta$ 1 (at position 45) all confer a risk of achalasia. Given the strength of the MHC association signal, the authors suggest there is a role for immune-mediated processes in the development of idiopathic achalasia.

Original article Gockel, I. et al. Common variants in the HLA-DQ region confer susceptibility to idiopathic achalasia. Nat. Genet. doi:10.1038/ng.3029