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# IN BRIEF

## IMMUNOLOGY

### Antibodies to host cell receptors help clear HCV infection

Antibodies against host entry receptors have been shown *in vitro* and *in vivo* to curb HCV infection. Antibodies against the CD81 or claudin 1 receptors have now been found to benefit patients with HCV. Levels of these antibodies were higher in infected patients than uninfected controls. In addition, patients who resolved their infection had substantially higher levels of these antibodies than patients with persistent HCV infection. Functional studies indicate that these antibodies are induced in the early phase of HCV infection.

**Original article** Tawar, R. G. *et al.* Acute hepatitis C virus infection induces anti-host cell receptor antibodies with virus-neutralizing properties. *Hepatology* doi:10.1002/hep.27906

## COLORECTAL CANCER

### Combination treatment for refractory colorectal cancer

In a phase III randomized placebo-controlled trial, it has been found that TAS-102 improves overall survival in patients with refractory metastatic colorectal cancer. TAS-102 consists of trifluridine and tipiracil hydrochloride. In total, 800 patients were assigned to receive either TAS-102 or placebo at a 2:1 ratio. Median overall survival was 5.3 months on placebo and 7.1 months on treatment. Adverse events associated with treatment-included neutropenia (in 38% of those treated) and leukopenia (21%).

**Original article** Mayer, R. J. *et al.* Randomized trial of TAS-102 for refractory metastatic colorectal cancer. *N. Engl. J. Med.* **372**, 1909–1919 (2015)

## HEPATITIS

### Treatment of HCV infection in advanced liver disease

In a phase II open-label study ledipasvir, sofosbuvir and ribavirin were used to treat HCV-infected patients who have advanced liver disease and who had or had not undergone liver transplantation. Patients ($n = 337$) with either HCV genotype 1 (99%) or genotype 4 (1%) were treated for either 12 or 24 weeks. Sustained virologic response (SVR) was assessed 12 weeks after treatment. SVR12 was reached in 86–89% of those who were not transplant recipients. SVR12 ranged from 60–96% in transplant recipients depending on the severity of liver disease. Owing to adverse events, 13 (4%) patients discontinued treatment.

**Original article** Charlton, M. *et al.* Ledipasvir and sofosbuvir plus ribavirin for treatment of HCV infection in patients with advanced liver disease. *Gastroenterology* doi:10.1053/j.gastro.2015.05.010

## NAFLD

### Disparity in NAFLD between twins might be due to differential expression of microRNAs

The aim of the study was to assess whether epigenetic changes could account for variation in the development of NAFLD in twins. This prospective study recruited 40 pairs of twins (monozygotic and dizygotic). Six sets of twins were concordant for NAFLD and six were discordant. It was found that a set of 10 microRNAs could be used to distinguish between the twin that had NAFLD and the one that did not. The microRNAs were found to be highly heritable.

**Original article** Zarrinpar, A. *et al.* Serum microRNAs explain discordance of non-alcoholic fatty liver disease in monozygotic and dizygotic twins: a prospective study. *Gut* doi:10.1136/gutjnl-2015-309456