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IN BRIEF

LIVER

siRNA-loaded nanoparticles resolve liver fibrosis in mice

Antifibrotic therapies are urgently needed to treat liver fibrosis. Now, researchers have shown that a small interfering RNA against the procollagen α1(I) gene packaged into a lipid-like nanoparticle (LNP-siCol1a1) can reduce experimental liver fibrosis in mice with progressive and advanced disease. Intravenous injection of LNP-siCol1a1 led to suppression of procollagen α1(I) expression (up to 90%) and decreased collagen deposition (by 40–60%). Moreover, regression of liver fibrosis was induced and progression of fibrosis inhibited.

Original article Jiménez Calvente, C. *et al.* Specific hepatic delivery of procollagen α1(I) siRNA in lipid-like nanoparticles resolves liver fibrosis. *Hepatology* doi:10.1002/hep.27936

THERAPY

FMT effective in patients with severe and/or complicated CDI

Faecal microbiota transplantation (FMT) is an effective treatment for recurrent *Clostridium difficile* infection (CDI). Now, a multicentre study aimed to investigate whether FMT could be used as treatment in severe and/or complicated cases of CDI. The researchers found that FMT was safe and effective in this patient population ($n=17$ total; mean follow-up 11.4 months). Primary and secondary cure rates were 88.2% and 94.1%, respectively, and no adverse effects directly related to FMT were observed.

Original article Aroniadis, O. *et al.* Long-term follow-up study of fecal microbiota transplantation for severe and/or complicated *Clostridium difficile* infection: a multicenter experience. *J. Clin. Gastroenterol.* doi:10.1097/MCG.0000000000000374

PANCREATIC CANCER

No benefit for addition of metformin to standard therapy for advanced pancreatic cancer

In a phase II, double-blind, randomized, placebo-controlled trial, the addition of a conventional anti-diabetic dose of metformin does not improve outcomes in patients with advanced pancreatic cancer receiving standard therapy (gemcitabine and erlotinib). Of the 121 patients enrolled in the study, 61 received standard therapy plus placebo, with 60 receiving metformin in addition to standard therapy. No difference in overall survival was observed between groups.

Original article Kordes, S. *et al.* Metformin in patients with advanced pancreatic cancer: a double-blind, randomised, placebo-controlled phase 2 trial. *Lancet Oncol.* **16**, 839–847 (2015)

GUT MICROBIOTA

Engineered microbes treat experimental hyperammonemia

Gut microbes have been engineered to have reduced urease activity in a bid to ameliorate hyperammonemia. In a proof-of-concept study, the existing gut microbiota was depleted in mice before inoculation with altered Schaedler flora (a defined set of eight bacteria with low levels of urease gene content and activity). Long-term reduction in faecal urease activity and ammonia production was observed upon colonization. Inoculation of the same microbial consortium in mouse models of acute and chronic liver injury resulted in decreased morbidity (cognitive impairment) and mortality.

Original article Shen, T. C. *et al.* Engineering the gut microbiota to treat hyperammonemia. *J. Clin. Invest.* **125**, 2841–2850 (2015)