Nature Reviews Endocrinology | Published online 11 Nov 2016

IN BRIEF

NASH

Understanding how steatosis progresses to NASH

Not much is known about how steatosis, which is often present in people with obesity, progresses to nonalcoholic steatohepatitis (NASH). A new paper published in Cell Metabolism implicates the transcription regulator TAZ in this process. The researchers found that levels of TAZ were higher in hepatocytes from humans and mice with NASH than in hepatocytes from normal or steatotic livers. They also silenced TAZ in a mouse model of NASH, which prevented or even reversed hepatic inflammation, hepatocyte death and fibrosis; however, steatosis was not affected. Conversely, when the researchers increased expression of TAZ in hepatocytes, features of NASH developed. Mechanistic studies enabled the team to establish that TAZ promotes fibrosis by inducing expression of *lhh* (encoding Indian hedgehog), which increases the expression of profibrotic genes in hepatic stellate cells. ORIGINAL ARTICLE Wang, X. et al. Hepatocyte TAZ/WWTR1 promotes inflammation and

ORIGINAL ARTICLE Wang, X. et al. Hepatocyte IAZ/WW IR1 promotes inflammation and fibrosis in nonalcoholic steatohepatitis. *Cell Metab*. <u>http://dx.doi.org/10.1016/j.</u> <u>cmet.2016.09.016</u> (2016)

SURGERY

Which patients will respond to bariatric surgery?

Bariatric surgery can result in remission of type 2 diabetes mellitus (T2DM). However, as not all patients will respond in the same way, a method to predict which patients are most likely to undergo remission of T2DM after bariatric surgery would be useful. Now, a team from Denmark has combined information on clinical traits and genetic variants to create a machine-learning model that could be used to predict which patients are likely to experience remission of T2DM after bariatric surgery. Insulin treatment, baseline serum levels of HbA_{1c} and insulin and use of insulin-sensitizing agents were the most important clinical factors. Adding information on eight single nucleotide polymorphisms in ABCA1, ARHGEF12, CTNNBL1, GLI3, PROK2, RYBP, SMUG1 and STXBP5 improved the accuracy of the model. **ORIGINAL ARTICLE** Pedersen, H. K. *et al.* Ranking factors involved in diabetes remission

after bariatric surgery using machine-learning integrating clinical and genomic biomarkers. *npj Genomic Medicine* <u>http://dx.doi.org/10.1038/npjgenmed.2016.35</u> (2016)

Effectiveness of a brief physician intervention

Although many guidelines recommend that physicians give their patients brief advice about weight loss, many do not. A new randomized trial conducted in the UK has found that a brief intervention from a physician can help patients with obesity to lose weight. The trial included 1,882 patients with obesity who were randomly assigned to either receive advice to enrol in a weight management group (the support group) or to receive advice that weight loss would be beneficial for their health (the advice group). After 12 months, patients in both groups had lost weight, with those in the support group losing more than those in the advice group (mean 2.43 kg versus 1.04 kg). Patients were also asked their thoughts about the intervention. Only four patients felt that the intervention was inappropriate and unhelpful; 1,530 patients said that the intervention was appropriate and helpful. The investigators conclude that a brief opportunistic intervention from a physician is acceptable to patients and could be an effective way of helping patients with obesity to lose weight.

ORIGINAL ARTICLE Aveyard, P. et al. Screening and brief intervention for obesity in primary care: a parallel, two-arm, randomised trial. Lancet <u>http://dx.doi.org/10.1016/</u>S0140-6736(16)31893-1 (2016)