

Artificial Intelligence in Gastroenterology

What is the role of artificial intelligence in the field of gastroenterology? This month's issue of *Gastroenterology & Hepatology* includes an intriguing review article on the present and future applications of artificial intelligence in the practice of gastroenterology. As Dr Ryan W. Stidham explains, artificial intelligence uses computational methods that enable machines to learn from patterns and relationships in data in order to make predictions. He describes how natural language processing can be used to extract knowledge from text, how machine vision can analyze and recognize images (particularly endoscopic and cross-sectional), and how data can be modeled for the prediction of outcomes. He also acknowledges the challenges associated with using artificial intelligence, pointing out several issues that need to be resolved.

Our other review article centers on obesity in patients with inflammatory bowel disease (IBD). As Dr Amanda M. Johnson and Dr Edward V. Loftus Jr note, the increasing prevalence of obesity is also occurring in the IBD population, and there are many questions regarding the relationship between IBD and obesity. The authors examine whether obesity affects the pathogenesis or phenotype of IBD and whether obesity affects outcomes of IBD. They also discuss how obesity impacts medical and surgical treatment of IBD, as well as costs and quality of life. Additionally, the authors examine whether the treatment of obesity impacts IBD outcomes.

Our coverage of IBD continues with our Advances in IBD column, which highlights the targeting of beta-7 integrins in the management of this disease. Among other issues, Dr Jesus Rivera-Nieves discusses how and why these integrins are targeted, which current and emerging IBD drugs use this therapeutic approach, the safety of this

type of treatment, how patients should be followed, and future areas of research.

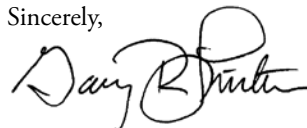
Treatment of primary biliary cholangitis is the focus of our Advances in Hepatology column. Dr Alan Bonder discusses the current first- and second-line therapies for this condition and their response rates, as well as data on treatments in development that target peroxisome proliferator-activated receptors, new farnesoid X receptor agonists, and combination therapy, along with related issues.

The effects of placebo and nocebo in the setting of irritable bowel syndrome (IBS) are explored in our Advances in IBS column. Dr Anthony J. Lembo discusses the psychological and neurobiological factors that may contribute to these effects, possible predictors of response, the challenges caused by high placebo response rates in clinical trials, and the use of open-label placebo, among other issues.

Finally, the risk of nonalcoholic steatohepatitis (NASH) and progressive fibrosis is highlighted in our NASH in Focus column. Along with related issues, Dr Mazen Nouredin discusses various demographic, laboratory, and histopathologic factors and how they can be combined to determine which patients have the greatest risk, as well as recent research on African-American race, sex, genetics, and the microbiome in this area.

May this issue provide you with helpful information that you can put to good use in your clinical practice.

Sincerely,



Gary R. Lichtenstein, MD, AGAF, FACP, FACG

