

LETTER FROM THE EDITOR



When the direct-acting antiviral (DAA) agents boceprevir (Victrelis, Merck) and telaprevir (Incivek, Vertex) were first approved for the treatment of genotype 1 hepatitis C virus (HCV) infection, attention was largely focused on clinical outcomes. Now that both drugs have been available for more than 1 year, however, interest has expanded into a number of related areas. Beyond the question of whether these new drugs work—both research data and clinical experience have shown that they do—researchers are also examining questions of cost-effectiveness, epidemiology, and treatment of special populations.

For example, a recent study in *Hepatology* tackled the question of when the use of DAA agents is most cost-effective (2012;56:850-860). Using a Markov decision model to address this issue, Cammà and coauthors compared 5 different regimens: response-guided therapy with boceprevir; interleukin (IL)-28B genotype-guided therapy with boceprevir, in which patients with the CC genotype received dual therapy with peginterferon and ribavirin; rapid virologic response (RVR)-guided therapy with boceprevir, in which patients who achieved RVR during lead-in therapy were treated with dual therapy; response-guided therapy with telaprevir; and IL-28B genotype-guided therapy with telaprevir, in which patients with the CC genotype received dual therapy. Comparison of these 5 treatment strategies showed that IL-28B genotype-guided telaprevir therapy and RVR-guided boceprevir therapy were the most cost-effective and the most clinically effective regimens, with both treatments yielding an improvement in survival of more than 4 years.

In addition to questions about cost-effectiveness, another challenging aspect of HCV therapy is that many HCV-infected patients have not been diagnosed and/or are not receiving treatment. Thus, the consequences of HCV infection will continue to unfold over time, often in ways we cannot yet predict. To help address this question, Deuffic-Burban and coauthors created Markov models to predict HCV progression in 6 European countries (*Gastroenterology*. 2012;143:974-985). Because these countries differ in terms of HCV screening practices, access to therapy, and the dynamics of HCV infection within each population, these models revealed different trends for HCV-related cirrhosis and mortality. For example, these models found that the total number of patients with cirrhosis has likely already peaked in Italy (in 2008); in Belgium, France, and Germany, the projected peak will occur within approximately 10 years, and in Spain and the United Kingdom, it will not occur until 2030 or later.

While this study did not analyze data from the United States, its findings are still relevant, as it illustrates how differences in screening and access to care can alter the occurrence of HCV-related disease in a population.

Finally, a recently published study in *Hepatology* examined sustained virologic response (SVR) rates among incarcerated patients, a group that has a high rate of HCV infection but also good access to care (2012;56:1252-1260). While the prevalence of chronic HCV infection is higher among incarcerated individuals (12–31%) than the general population (2%), response to treatment was found to be similar in both groups. Specifically, Rice and colleagues showed that SVR rates were 43% for incarcerated patients and 38% for nonincarcerated patients ($P=.304$). Given that incarcerated patients were more likely to be male and/or black and were more likely to have a history of alcohol or intravenous drug use, their ability to attain an SVR rate similar to that observed in the nonincarcerated population suggests that their access to healthcare may play an important role in improving outcomes.

As we continue to move forward with DAA-based therapy for HCV, such studies will hopefully shed light on the broader context within which treatment occurs. For many clinicians, however, such data may be of interest only as a side note, given that our main focus is on whether treatment will succeed in a particular patient. To inform such questions—in HCV infection as well as other conditions—this month's issue of *Gastroenterology & Hepatology* includes a review of DAA agents in patients with HCV cirrhosis and a feature article on a low-FODMAP diet for the treatment of irritable bowel syndrome. This month's columns address the treatment of gastroesophageal reflux disease during pregnancy, the use of cryotherapy for the eradication of Barrett esophagus or early cancer, the possible benefit of vitamin D supplementation for patients with chronic liver disease, and ways to assess disease activity in patients with ulcerative colitis. Finally, this month's case studies present a series of 3 patients with gastric phytobezoars that were dissolved with ingestion of Diet Coke and cellulase as well as a patient with Langerhans cell histiocytosis and choledocholithiasis.

Sincerely,

A handwritten signature in black ink that reads "Gary R. Lichtenstein". The signature is fluid and cursive, with the first name being the most prominent.

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