

The authors thank Karimi-Sari et al. for their thoughtful commentary on the elimination of viral hepatitis in the context of the current COVID-19 pandemic. We agree that while all attentions are currently on COVID-19, it is important to not to lose focus on other causes of death and morbidity. We appreciate the endorsement of the World Health Organization goals of hepatitis C virus (HCV) elimination, and implicitly, the exploration of the emergency department as a setting for HCV screening.

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A letter of solidarity during the COVID-19 pandemic

The coronavirus disease (COVID-19) pandemic has had a substantial impact on the lives of most of the worlds' population. We are aware that for liver disease patients this has been especially concerning. The editorial from Sun et al¹ provides an overview of the major challenges facing liver specialists as they strive to deliver essential services and highlights some of the critical research gaps around COVID-19 and liver disease. We fully agree with the concerns and priorities set out by the authors and further urge the liver health community to bring public health to the fore, both in the ongoing emergency response and the longer-term recovery period.



There is specific concern for patients with chronic liver diseases during the pandemic. The European Association for the Study of the Liver (EASL) and the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) have issued a joint position paper for clinicians caring for patients with liver disease, including practical recommendations for ensuring continuity of care, such as the use of telemedicine.² While care should continue in line with guidance, there are major access barriers for those with chronic conditions such as hepatitis B and C because of confinement regulations and the closure of outreach services.

It is increasingly clear that overcoming this pandemic will be a protracted challenge. Governments will look to transition from emergency action to long-term policy responses that balance public health with economic and social considerations. During this time, the liver health community cannot lose sight of the importance of our long-term public health goals. For example, many countries are off course to achieve the World Health Organization's 2030 viral hepatitis elimination targets³ and must urgently redouble efforts.

Because of the pandemic, politicians and the general public are now acutely aware of the importance of public health. We must leverage this opportunity to position public health and the pandemic preparedness it encompasses as the pathway to healthier, safer and more prosperous societies. This must go beyond the immediate

efforts to tackle COVID-19 to holistically address liver health, including viral hepatitis elimination and the major public health challenges of the 21st century: non-communicable diseases, including NAFLD/NASH.⁴

Of central importance, as we move forward, the EASL International Liver Foundation urges that services better reach the most vulnerable in society. In 2020 and beyond, we will continue to work with our partners to make this a reality.

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Discontinuation rate of azathioprine

To the Editor,

The purpose of the title was to draw attention to the fact that discontinuation of azathioprine (AZA) in autoimmune hepatitis (AIH) treatment should be central to our thinking.¹ The title caught the attention of the authors,² so we achieved that goal.

The AZA discontinuation rate in AIH is lower compared to that in inflammatory bowel disease (IBD), possibly because of higher dosages and richer choice of options in the latter. Early adverse reactions are more frequent in Crohn's disease compared to AIH (29% vs 5%), despite identical drug doses.³ The majority of AIH patients (73% in our study) use AZA as the effective agent to maintain remission.¹ Every AIH patient who is lost from AZA monotherapy needs alternative options, a situation for which current guidelines offer little guidance. There is little consensus among experts on which second- or third-line options to employ in this clinical scenario. As a corollary, we think that AZA has a pivotal place in the armamentarium of AIH and prevention of AZA discontinuation is paramount.

We agree with the authors that optimizing AZA therapy using therapeutic drug monitoring (TDM) is a promising strategy to reduce the need for second- or third-line therapy. In contrast to IBD, evidence on the value of TDM in adult AIH is ill explored. A fine example is the clinical value of thioguanine nucleotide (TGN) levels in predicting AZA efficacy and toxicity. One study found that (despite lower doses of AZA) an average TGN concentration of $> 220 \text{ pmol}/8 \times 10^8$ is associated with remission, whereas another study did not establish such a correlation.^{4,5} Both thiopurine methyltransferase phenotyping and genotyping do not predict intolerance to AZA in AIH patients.⁴ These studies suggest that TDM strategies might not only help in improving the risk-benefit ratio of AZA in AIH but also emphasize the need to bolster its clinical evidence before general implementation of TDM in AIH.

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CONFLICT OF INTEREST

None.

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