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Cure prevents more than transmission of HCV

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Dear Editor,

We read with interest the study by Cousien et al (1), which presents a comprehensive and elegant modeling approach to the treatment of HCV in people who inject drugs (PWID) in France that includes liver-disease progression/regression, the overall cascade of anti-HCV care, and rich field data. However, we were surprised that the model assumed no liver-related benefit after HCV eradication (termed sustained virological response, SVR) with direct-acting antiviral (DAA) treatment in patients with cirrhosis. In their model, the authors made the assumption of no reduction in complications of cirrhosis after SVR in patients with established cirrhosis by citing our study (2), which actually showed that the rate of all complications, including hepatocellular carcinoma (HCC), liver-related and even all-cause mortality, was markedly reduced after SVR. Others have shown that cirrhosis actually resolved in half of patients who achieved SVR, with greater than a 70% reduction in the risk of HCC and a 90% reduction in the risk of liver-related mortality and liver transplantation (www.hcvguidelines.org).

While the proportion of PWID with cirrhosis is relatively small, it would be helpful for the authors to report whether their results would change, assuming that cirrhotic PWID who achieve SVR will have a marked reduction in the risk of HCC, decompensation, and liver disease related mortality as supported by our data and others (2). Fortunately taking into account the benefits of SVR would only strengthen the rationale for advancing treatment in PWID, which seems relatively feasible according to their projections. This revision to the model would strengthen the credibility of the results and is of particular importance when modeling projections in PWID populations are used to evaluate the impact of treatment scenarios in absolute numbers.

In conclusion, the model from Cousien and colleagues provides important insights into the potential impact of treatment as prevention for the management of HCV in PWID. However, the assumptions of the model should include the significant reduction in all-cause complications post-SVR, including HCC and decompensation along with regression in fibrosis, among PWID with established cirrhosis. This assumption is of importance for accurate modeling predictions and policy making in countries (e.g., USA) with barriers restricting access to DAA treatment for PWID (3).

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