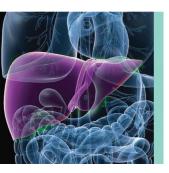
# **REVIEW**



# AGA Clinical Practice Update on Interaction Between Oral Direct-Acting Antivirals for Chronic Hepatitis C Infection and Hepatocellular Carcinoma: Expert Review

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In March 2019, the American Gastroenterological Association (AGA) published an update on the interaction between oral direct-acting antivirals for chronic hepatitis C infection and hepatocellular carcinoma. "The purpose of this clinical practice update is to evaluate the evidence

describing the interaction between direct-acting antiviral (DAA) therapy for hepatitis and hepatocellular carcinoma (HCC) with regard to HCC incidence, HCC recurrence, and DAA efficacy, and to summarize best practice advice regarding HCC surveillance and timing of DAA therapy."<sup>1</sup>

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# Best practice advice 1

DAA treatment is associated with a reduction in the risk of incident HCC. The relative risk reduction is similar in patients with and without cirrhosis.

#### Best practice advice 2

Patients with advanced liver fibrosis (F3) or cirrhosis should receive surveillance imaging before initiating DAA treatment.

Abbreviations: AGA, American Gastroenterological Association; DAA, direct-acting antiviral; HCC, hepatocellular carcinoma. From the \*Division of Digestive and Liver Diseases, UT Southwestern Medical Center, Dallas, TX; <sup>†</sup>Yale Liver Center and Section of Digestive Diseases, Yale University School of Medicine, New Haven, CT; <sup>‡</sup>Section of Gastroenterology and Hepatology, Baylor College of Medicine, Houston, TX; and <sup>§</sup>Houston Veterans Affairs Health Services Research and Development Center of Excellence, Michael E. DeBakey Veterans Affairs Medical Center, Houston, TX. Received February 4, 2020; accepted February 5, 2020.

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# Best practice advice 3

Patients with advanced liver fibrosis (F3) or cirrhosis at the time of DAA treatment represent the highest-risk group for HCC after DAA-induced sustained virologic response. These patients should stay in HCC surveillance.

#### Best practice advice 4

HCC surveillance should be performed using ultrasound with or without  $\alpha$ -fetoprotein every 6 months. Current data do not support shorter surveillance intervals or the use of alternative surveillance modalities.

#### Best practice advice 5

Future studies may show a reduction in HCC risk over time after DAA-induced sustained virologic response. However, in the interim, HCC surveillance should continue indefinitely if patients are otherwise eligible for potentially curative therapy.

# Best practice advice 6

The presence of active HCC is associated with a small but statistically significant decrease in sustained virologic response with DAA therapy.

# Best practice advice 7

Patients with HCC who are eligible for potentially curative therapy with liver resection or ablation should defer DAA therapy until after HCC treatment is completed.

#### Best practice advice 8

Timing of DAA therapy for patients with HCC who are listed for liver transplantation should be determined with consideration of median wait times, availability of hepatitis C virus-positive organs, and degree of liver dysfunction.

#### Best practice advice 9

There are insufficient data evaluating benefits and cost-effectiveness of DAA therapy in patients with active intermediate or advanced HCC. Decisions regarding DAA treatment in these patients should be considered in light of HCC tumor burden, degree of liver dysfunction, life expectancy, and patient preferences.

#### Best practice advice 10

There are no conclusive data that DAA therapy is associated with increased or decreased risk, differential time to recurrence, or aggressiveness of recurrent HCC in patients with complete response to HCC therapy.

#### Best practice advice 12

Patients with complete response to HCC therapy who are treated with DAAs have a continued risk of HCC recurrence and require HCC surveillance, which should be conducted indefinitely with dynamic contrast-enhanced computed tomography or magnetic resonance imaging every 3–6 months. Current data do not support more frequent surveillance in these patients. This Clinical Practice Update was produced by the AGA Institute.

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Please listen to Dr. Singal discuss the important updates and impact on patient management from this publication.

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#### REFERENCE

 Singal AG, Lim JK, Kanwal F. AGA clinical practice update on interaction between oral direct-acting antivirals for chronic hepatitis C infection and hepatocellular carcinoma: Expert review. Gastroenterology 2019; 156:2149-2157.