## Preface Advances in Hepatocellular Carcinoma





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Hepatocellular carcinoma (HCC) has been increasing in incidence and prevalence for more than 30 years. As hepatologists have become more adept at treating underlying liver disease and cirrhosis, patients with cirrhosis are living longer, and with longer duration of cirrhosis comes an increased risk of HCC development. Cirrhosis is the underlying disease in most patients with HCC, although around 10% of HCC occurs without cirrhosis, often in the setting of chronic hepatitis B infection. Unfortunately, even with improving treatments for viral hepatitis, cirrhosis has continued to increase worldwide, due to the epidemic of nonalcoholic fatty liver disease and increasing alcoholic liver disease. Screening and surveillance have long been shown to improve survival, and despite clear guidelines from the American Association for the Study of Liver Disease, the European Association for the Study of the Liver, and the Asian Pacific Association for the Study of the Liver, rates of compliance with screening and surveillance for patients at risk for HCC remain low. Because of the low rates of screening and surveillance, many patients with HCC continue to present in an advanced stage that precludes curative therapy.

For more than a decade, treatment options for HCC have been limited to surgical (resection and transplant) and locoregional (ablation, chemoembolization, and radioembolization), with limited systemic therapy options. Sorafenib was approved in 2007 and was the sole systemic therapy that has been shown to improve survival in HCC. The previous issue of *Clinics in Liver Disease* dedicated to HCC was published in May 2015. Since that time, significant advances in the field of HCC have been made. I have had the honor of being a guest editor for this issue of *Clinics in Liver Disease*, and our talented and knowledgeable authors have outdone themselves with excellent articles. Dr Salgia outlines how the epidemiology of HCC has changed in recent years. Drs Chan and Simon discuss strategies for prevention of development of malignancy in patients at risk. Dr Sharma discusses new information on biomarkers for screening and diagnosis, as well as the increasing utility of biopsy. Dr Zhang does a magnificent job of discussing the role of pathology in the era of precision medicine, which is significantly progressing in the treatment of all cancers. Dr Marrero discusses strategies to improve our screening and surveillance, while Drs Kono and Sirlin, who were the creators of the LIRADS radiographic diagnostic criteria for HCC, discuss how to appropriately diagnose HCC with imaging. Dr Vauthey is one of the grandfathers of liver resection, and he and Dr Kawagushi wrote an excellent article on resection strategies. Dr Heimbach is a surgeon who has been instrumental in liver transplant for HCC and appropriate allocation changes for liver transplantation and discusses new allocation changes that have altered how our HCC patients will obtain liver grafts for transplantation. Dr Mehta has had multiple publications about downstaging HCC to within transplant criteria, and his data have contributed to the major changes in liver transplantation for HCC, with patients now being eligible for transplant who previously would not have been able to receive a liver graft. Dr Kulik and her team in Chicago discuss locoregional and transarterial strategies for local HCC treatment. Dr Chen is a dear friend and colleague and wrote about his experience and new data for use of external beam radiotherapy for HCC treatment. I can't emphasize enough how much I respect and admire Jordi Bruix, and he and his colleagues were kind enough to discuss the new tyrosine kinase inhibitor therapies. Dr He is a well-respected oncologist in the field of HCC, and she discusses the present and future uses of immunotherapy and immunooncology for HCC treatment. Dr Saab is one of my favorite people to work with and wrote a guide for the hepatologist on management of side effects of systemic therapies for HCC. Dr Naugler and colleagues round out this issue with an article explaining and demonstrating how in this complicated disease state that a multidisciplinary tumor board remains as critical as ever in treatment of HCC.

I hope you enjoy this issue of *Clinics in Liver Disease*. I would like to thank Dr Norman Gitlin for the invitation, and Norm, I hope you are enjoying Southern California. I would also like to thank Kerry Holland and Donald Mumford for their patience, perseverance, and professionalism with helping to bring this issue to fruition. Thank you to our readers for reading this issue, and I hope you are enjoying it with a large cup of coffee!

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