DR. TEH-IA HUO (Orcid ID : 0000-0003-2202-521X)

Author Manuscript

Article type : Correspondence

Correspondence

Staging and restaging for hepatocellular carcinoma: Solution of confusion?

Teh-Ia Huo, MD,[1,2,3] Po-Hong Liu, MD, MPH[2,4] Chia-Yang Hsu, MD, MPH[2,5]

[1]Department of Medicine, Taipei Veterans General Hospital, Taipei, Taiwan;

[2]Faculty of Medicine, [3]Institute of Pharmacology, National Yang-Ming University School of Medicine, Taipei, Taiwan;

[4]Department of Internal Medicine, University of Texas Southwestern Medical Center, Dallas, Texas, USA;

[5] Division of Gastroenterology and Hepatology, University of Michigan, Ann Arbor, MI, USA

Key words: hepatocellular carcinoma; staging

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1002/hep.30324

This article is protected by copyright. All rights reserved

Word count: 500 (including references)

Financial support: This study was supported by the grant **(**VN107-04**)** from Taipei Veterans General Hospital, Taiwan.

Conflict of interest statement: There is no conflict of interest.

Number of figures and tables: 0

Authorship statement:

Guarantor of the article: Teh-Ia Huo

Specific author contributions: T.-I. Huo and P.-H. Liu performed the research. C.-Y. Hsu contributed to the design of this study. All authors approved the final version of the manuscript.

Correspondence:

Teh-Ia Huo, M.D.

Division of Gastroenterology and Hepatology

Department of Medicine

Taipei Veterans General Hospital

Taipei, Taiwan

Tel: + 886 2 2871 2121 Ext.: 2050

Fax: + 886 2 2873 9318

Email: tihuo@vghtpe.gov.tw

This article is protected by copyright. All rights reserved

Author Manuscript

To the Editor:

We read with interest the paper "Restaging patients with hepatocellular carcinoma before additional treatment decisions: a multicenter cohort study" by Dr. Vitale *et al.* published in an upcoming issue of Hepatology.[1] Although it is an elegant study containing a large cohort of hepatocellular carcinoma (HCC) patients, some concerns should be addressed.

The Italian Liver Cancer (ITA.LI.CA) staging system was proposed by the Italian investigators to predict the outcome of HCC patients. The ITA.LI.CA used a scoring method (from 0 to 13) to allocate patients into 4 prognostic groups. However, in most currently used systems, at least 5 groups are employed to reflect the highly variable outcome of HCC. A more recent study further indicated that by using clinically available parameters, 7 distinct prognostic groups can be identified.[2] Notably, the study by Vitale *et al.* only compared ITA.LI.CA with BCLC, HKLC and CLIP systems.[1] This is apparently not adequate because other important prognostic tools, such as JIS, MESIAH and MESH, were not discussed in the study.

Multiple staging systems have been proposed and generally claimed to have better prognostic performance. The lack of consensus may result from heterogeneous nature of tumor biology and variable treatment strategies at initial staging and restaging. The Child-Turcotte-Pugh (CTP) classification is used in the ITA.LI.CA system. However, a new marker, the albumin-bilirubin (ALBI) grade, as a refinement of the CTP classification, was proposed as a more reliable prognostic marker for HCC.[3] A major disadvantage of CTP classification in HCC is that many patients are non- or mildly cirrhotic and classified as CTP class A. Further discrimination by the ALBI grade showed that it can identify two prognostic groups, implying that not all CTP class A

This article is protected by copyright. All rights reserved

Author Manuscript

patients are the same.[4] Therefore, it is interesting to know if the ALBI grade, instead of CTP classification, should be used in the ITA.LI.CA system for outcome prediction. In summary, a more comprehensive evaluation for the existing staging systems for HCC should be performed to determine which model has the best predictive accuracy. The ALBI grade, as a new player in HCC, may be considered to integrate into the staging system to further enhance the prognostic performance.

References

1. Vitale A, Farinati F, Noaro G, Burra P, Pawlik TM, Bucci L, et al. Restaging patients with hepatocellular carcinoma before additional treatment decisions: a multicenter cohort study. Hepatology 2018 (in press) doi: 10.1002/hep.30185. [Epub ahead of print]
2. Liu PH, Hsu CY, Hsia CY, Lee YH, Huang YH, Su CW, et al. Proposal and validation of a new model to estimate survival for hepatocellular carcinoma patients. Eur J Cancer 2016;63:25-33.
3. Johnson PJ, Berhane S, Kagebayashi C, Satomura S, Teng M, Reeves HL, et al. Assessment of liver function in patients with hepatocellular carcinoma: a new evidence-based approach-the ALBI grade. J Clin Oncol 2015;33:550-8.
4. Liu PH, Hsu CY, Hsia CY, Lee YH, Chiou YY, Huang YH, et al. ALBI and PALBI grade predict survival for hepatocellular carcinoma across treatment modalities and BCLC stages in the MELD era. J Gastroenterol Hepatol 2017;32:879-86

Author Manuscript

This article is protected by copyright. All rights reserved