



Nomograms should be noted

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Hepatocellular carcinoma (HCC) is one of the major health problems in the Asian Pacific area [1]. HCC is the sixth most common malignancy worldwide and the third leading cause of cancer-related death [2]. With the improvement of health standards, the elderly account for more than one-third of patients with HCC [3]. Furthermore, the incidence of HCC is estimated to increase by about 59% by 2030, and patients over 65 years of age are expected to account for more than 50% of all HCC patients by that time [4]. Elderly patients are often complicated by multiple diseases, accompanied by an additional age-related decline in physical capacity, and these factors have a significant impact on life expectancy [5]. Furthermore, recent studies have reported that muscle mass has a significant impact on prognosis [6]. Therefore, in predicting the prognosis of hepatocellular carcinoma in the elderly, it is necessary to consider them separately from younger patients. However, current HCC treatment guidelines specify recommended treatment by liver function and tumor factors, but do not take into account differences by age [7]. Currently, there is not enough evidence to guide the treatment of liver cancer in elderly patients. Therefore, in this paper, the authors identified prognostic determinants in elderly HCC patients and developed a new prognostic model to predict overall survival (OS). This article was published in this journal 2023 Apr 17 by Tan et al. [8]. In recent years, nomograms have gained wide acceptance in the field of oncology as a reliable tool for assessing patient prognosis [7]. Nomograms are graphical representations of predictive statistical models for individual patients and have been developed for various types of cancer. Because nomograms

have proven to be superior to traditional staging systems that have been used to predict patient outcomes in many cancers, they have been proposed as an alternative or emerging standard to guide treatment strategies for cancer patients. On the other hand, its weaknesses must also be understood [9]. A search of "HCC and nomograms" in PubMed reveals 1178 articles in the past 10 years (Fig. 1). Of these, 46 nomograms were analyzed using Surveillance, Epidemiology, and End Results (SEER), a public database in the United States. These papers are a mix of good and bad. Excellent research papers with a high number of citations include nomogram for preoperative estimation of microvascular invasion risk in hepatitis B virus-related hepatocellular carcinoma [10] (cited 454), preoperative prediction of microvascular invasion [11] (cited 202), recurrence after liver transplantation [12] (cited 227), recurrence and survival after curative liver resection [13] (cited 199). Nomograms are most effective in predicting a single event in a limited population. Therefore, more accurate results can be obtained by narrowing the target, as seen in the risk of vascular invasion. On the other hand, the predictive probability of individual prognosis, a target with a complex interplay of multiple factors, is lower [14].

We must understand the essence of nomogram. Predictive results obtained from nomograms can differ significantly from real patient prognoses, depending on the conditions. In using nomograms, the most important aspect is to understand what population was analyzed to create them. The population used to create the nomogram and the population using the nomogram should not be far different in clinical characteristics.

The message of this paper is that nomograms generated using the SEER database, via an online interface (OHC-CPredictor), can be a useful tool in predicting prognosis and formulating treatment for older patients with HCC.

Outstanding of this paper is that a new prognostic model to predict OS was constructed by identifying independent prognostic factors (age, gender, marital status, T stage, N stage, surgery, chemotherapy, tumor size, AFP value, fibrosis score, bone metastasis, lung metastasis, and grade) in

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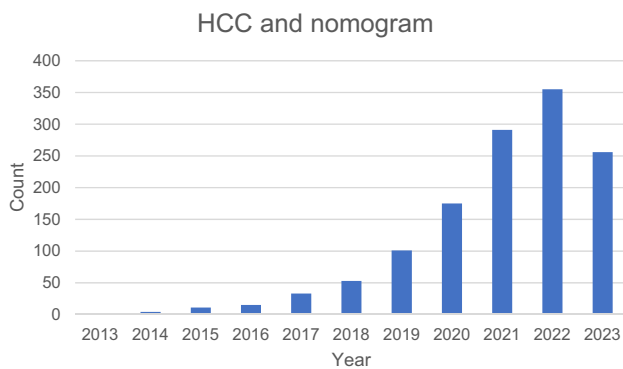


Fig. 1 HCC and nomogram

elderly HCC patients. The online web interface for the predictive model developed will be easily accessible to clinicians, facilitating treatment recommendations and aiding clinical decision-making.

In utilizing nomograms, we are necessary to understand that there are differences between the nomogram results and reality. This is due to changes over time, racial and regional differences, and other factors. Although that paper uses the SEER database, it must be understood that it uses statistical data on cancer, including cancer incidence, survival, and mortality rates in the United States since 1973.

Impact on clinical practice, rapid calculations with a user-friendly digital interface allow for improved accuracy compared to traditional staging and assist in clinical decision-making, along with more understandable prognostication.

We hope that prognostication of HCC in the elderly, which will increase in future, will help in the therapeutic management of this disease. Nomograms should be updated with databases consistent with the time period and region.

Declarations

Conflict of interest There are no conflicts of interest to declare.

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