ASO VISUAL ABSTRACT

ASO Visual Abstract: Development of a Biomarker-Based Scoring System Predicting Early Recurrence of Resectable Pancreatic Duct Adenocarcinoma

Keinosuke Ishido, MD (ORCID) **, Norihisa Kimura, MD, Taiichi Wakiya, MD, Hayato Nagase, MD, Yutaro Hara, MD, Taishu Kanda, MD, Hiroaki Fujita, MD, and Kenichi Hakamada, MD**

Department of Gastroenterological Surgery, Hirosaki University Graduate School of Medicine, Hirosaki, Japan

The questions addressed in our study were (1) "Is it possible to classify preoperatively the early recurrence group from resectable pancreatic cancer patients?" and (2) "Can neoadjuvant treatment for resectable pancreatic cancer simply improve the prognosis?"

A total of 178 patients diagnosed with resectable pancreatic cancer on the CT image and undergoing radical resection at our institute from 2005 to 2019 were retrospectively analyzed (http://doi.org/10.1245/s10434-021-10866-6). Patients with recurrence within 6 months after resection formed the early recurrence group. The other patients constituted the nonearly recurrence group. We analyzed the preoperative factors related to early recurrence; then, the early recurrence prediction score was developed using these parameters.

As a result, preoperative CA19-9, serum SPan-1, and CT tumor diameter were the preoperative factors related to early recurrence. We developed the early recurrence prediction scoring system using the cutoff values of these factors. It was revealed that score 3 was the independent factor for early recurrence. Furthermore, survival curve analysis demonstrated that the median recurrence-free survival and overall survival were 5.5 months and 15.9 months, respectively.

In conclusion, for resectable pancreatic cancer, the early recurrence group could be classified using preoperative CA19-9, SPan-1, and preoperative CT tumor diameter. The prognosis of patients with score 3 was extremely worse. This scoring system may have great significance in identifying patients with poor prognoses and avoiding unnecessary surgery.

DISCLOSURE The authors declare that they have no conflict of interest.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

K. Ishido, MD
e-mail: k-ishido@hirosaki-u.ac.jp