

### Construction and validation of a model for predicting the efficacy of pre-operative chemotherapy for osteosarcoma

**Qingshan Huang**

Peking University People's Hospital, China

**D**ue to the obvious heterogeneity of osteosarcoma, many patients are not sensitive to neoadjuvant chemotherapy. In this study, the clinical characteristics and auxiliary examinations of patients with osteosarcoma were used to predict the effect of preoperative chemotherapy. So as to guide the clinical adjustment of the treatment plan to improve the prognosis of patients. In this study, 90 patients with pathologically confirmed osteosarcoma were included, and they were randomly divided into training cohort and validation cohort. A prediction model of preoperative chemotherapy efficacy for osteosarcoma was established by multivariate logistic regression analysis, and a nomogram was used as the visualization of the model. Decision curve analysis (DCA) was used to evaluate the net benefit of the nomogram in predicting the efficacy of neoadjuvant chemotherapy under different threshold probabilities. C-index and ROC curve were used to evaluate the accuracy of the nomogram. DCA showed that the model had good clinical application value. The AUC and C-index of the training cohort were 0.793 and 0.881 respectively. The AUC and C-index in the validation cohort were 0.791 and 0.818 respectively, which were close to the training cohort. In brief, based on the clinical characteristics of patients and auxiliary examinations, the model can better predict the efficacy of preoperative chemotherapy for osteosarcoma

#### Biography

Qingshan Huang is a PhD student at Peking University People's Hospital, majoring in bone tumors. He has published many articles in the reputed journals.

weiweili21@163.com

Abstract received : July 31, 2023 | Abstract accepted : August 02, 2023 | Abstract published : 28-08-2023