



## Invited Commentary

A commentary on “Construction of a nomogram to predict overall survival for patients with M1 stage of colorectal cancer: A retrospective cohort study” (Int J Surg 2019; Epub ahead of print)



Although tumor-node-metastasis (TNM) staging system provides relevant information on the prognosis of patients with colorectal cancer, there are many variations in the outcomes of patients with the same tumor type and stage. Therefore, more prognostic studies, with standardized examination protocols are extremely relevant [1].

Ge H et al. [2] conducted the construction of a nomogram based on the Surveillance, Epidemiology, and End Results (SEER) database between 2004 and 2015 to predict overall survival (OS) for patients with M1 stage of colorectal cancer. The authors considered patients' age at diagnosis; gender; race; tumor site; tumor grade; T and N stage; brain, lung, bone, and liver metastasis status; marital status; and therapy for the association with OS.

However, the study could be improved if more details on how these colorectal cancer patients were included: how were they diagnosed? Were there any imaging or first intraoperative findings? Is there any history of other malignancies? Moreover, it would be necessary to include the established prognostic factors such as performance status and comorbid conditions such as diabetes into this study [3]. It is hard also to validate a model with the same limitations in both cohorts (training and validation).

The majority of patients in both the two cohorts, according to Ge H et al., were elderly ( $\geq 60$  years). For the overall United States (US) population, the incidence of colorectal cancer is declining. However, in the last several years the incidence was rising among adolescents and young adults [4] with an estimated increase of 90% for colon cancer and 124.2% for rectal cancer by 2030 [5]. To have an up-to-date understanding of the population's colorectal cancer prognosis, the nomogram should be updated with data which include patients of various ages. This study probably has an important selection bias if we also consider the new trends in incidences in the younger populations with colorectal cancer.

Some limitations as pointed out by the authors could alter the conclusion on prognosis of the two groups of patients, such as surgical procedures, chemotherapy regimens, and radiation dose/technology.

Also, serum carcino-embryonic antigen and other biological, genetic or molecular information should be collected in future studies. We support the authors' proposal to perform further prospective evaluation studies to deal with these limitations.

## Provenance and peer review

Invited Commentary, internally reviewed.

## References

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