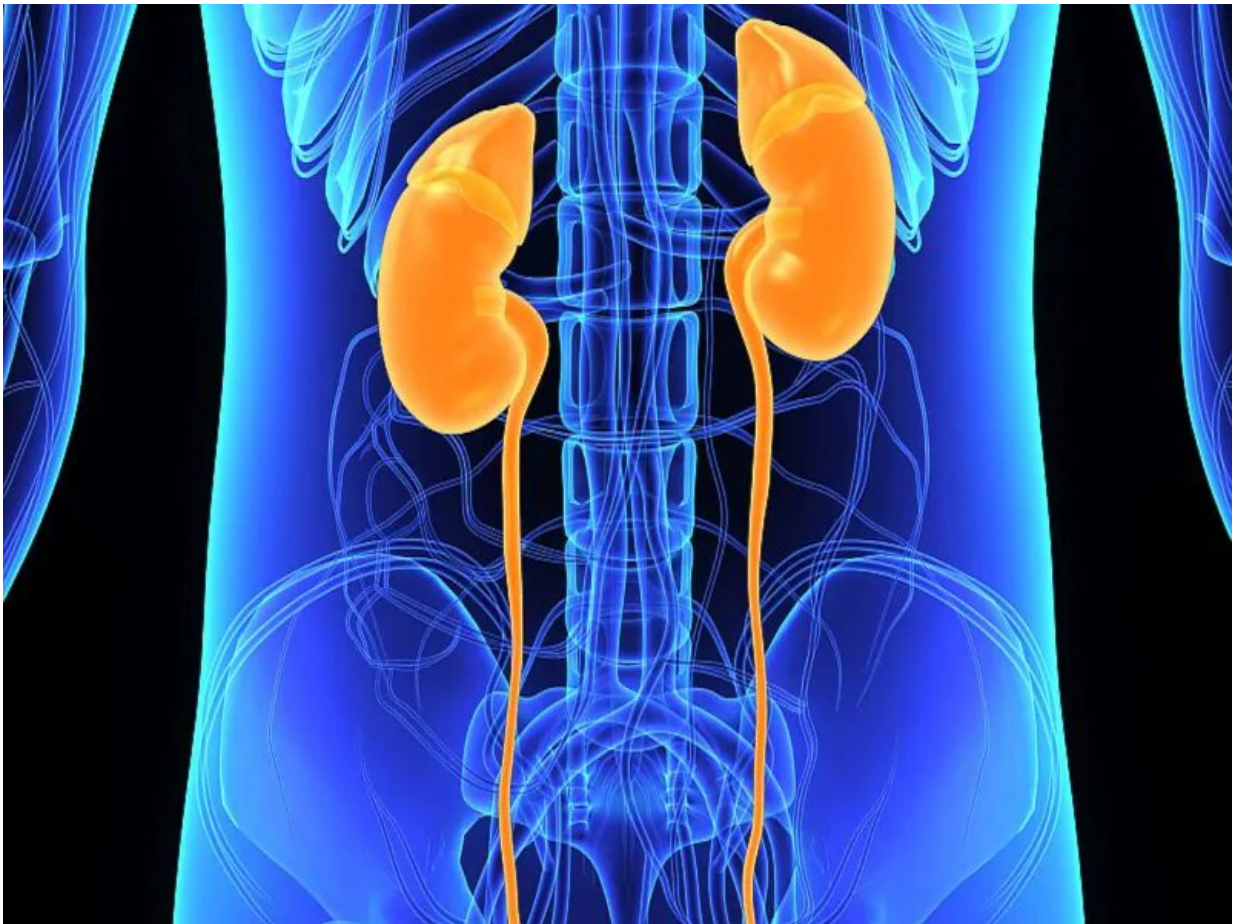# Medical Xpress

Study reveals lower predictive ability for renal cancer models

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(HealthDay)—Prospective validation of existing renal cell carcinoma

(RCC) prediction models demonstrates a decrease in their predictive ability, according to a study published online June 19 in the *Journal of Clinical Oncology*.

Andres F. Correa, M.D., from the Fox Chase Cancer Center in Philadelphia, and colleagues validated eight RCC recurrence models and the Tumor, Node, Metastasis (TNM) staging system using data from 1,647 patients with resected, localized, high-grade or locally advanced disease from the ASSURE trial cohort. Model predictive performance was quantified by assessing discriminatory and calibration abilities.

The researchers identified a [significant decrease](link) in each model's predictive ability in prospective validation compared with their original and externally validated discriminatory estimates. The SSIGN model performed best and the UISS model performed worst (C-statistics, 0.688 and 0.556, respectively). Most of the models marginally outperformed standard staging compared with the 2002 TNM staging system (C-index, 0.60). Significant variability was seen for the predictive ability of all models over time, and they were most useful within the first two years of diagnosis.

"Medicine has come to rely on prognostic models and has put a lot of time and resources into developing them, but they are far less robust than we would have hoped," a coauthor said in a statement. "In some cases, using these models to predict future events is not much better than the flip of a coin."

Two authors disclosed financial ties to the pharmaceutical industry.

  More information: [Abstract/Full Text (subscription or payment may be required)](link)

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