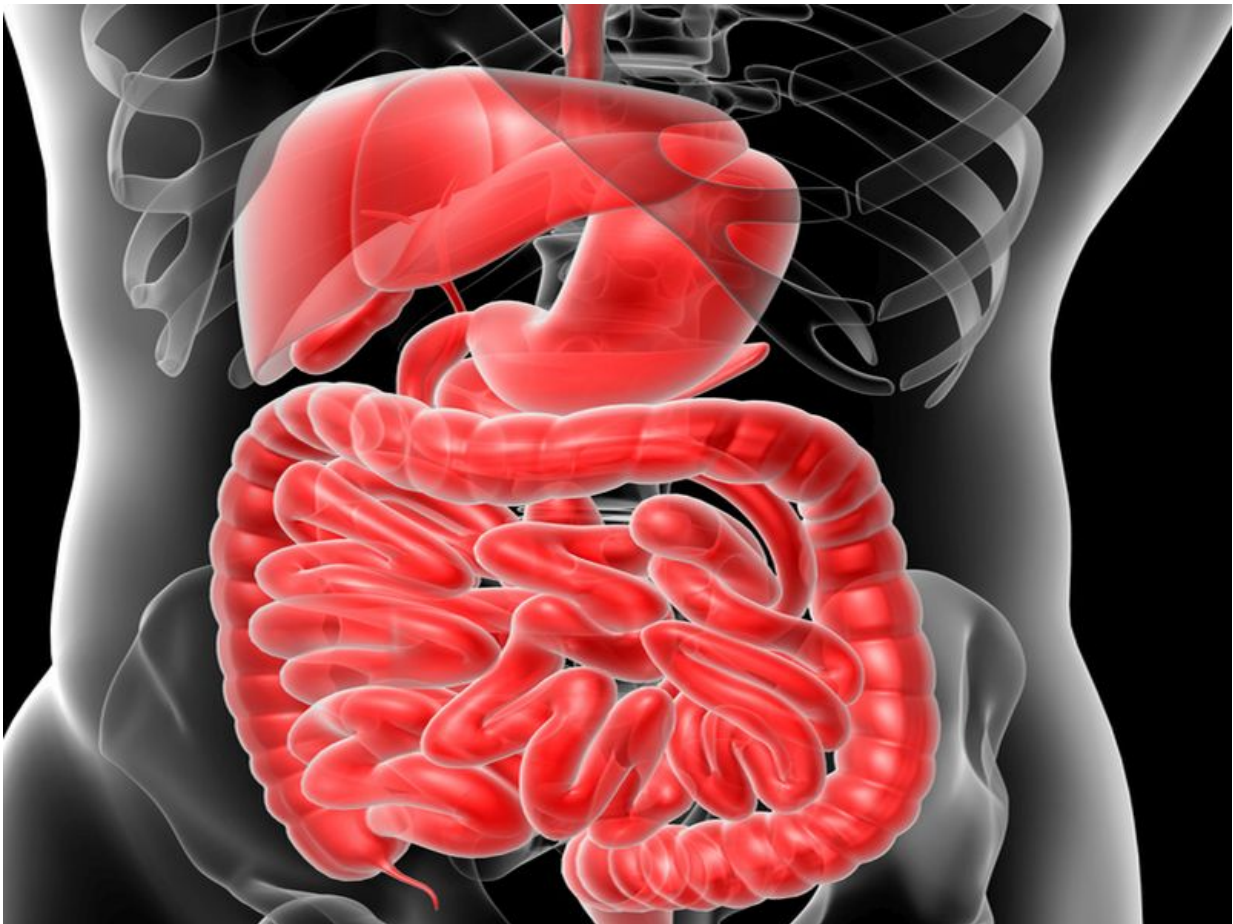


# Protein expression predicts rectal cancer outcomes

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(HealthDay)—Loss of E-cadherin protein expression in the

pretherapeutic biopsy of rectal cancer is associated with fewer metastases and improved survival, according to a study published online March 25 in the *Journal of Digestive Diseases*.

Jonas Jessberger, from the Friedrich-Alexander-Universität Erlangen-Nürnberg in Germany, and colleagues evaluated 223 patients with [rectal cancer](#) treated with neoadjuvant radiochemotherapy followed by surgery. Protein expression of E-cadherin and [tumor](#) growth pattern (solid-glandular versus single-cell pattern) were assessed using 88 biopsies prior to radiochemotherapy and 213 tumor resections.

The researchers observed a significant decrease of E-cadherin expression ( $P = 0.002$ ) and a significant increased single-cell growth ( $P = 0.001$ ) at the invasion front in tumor samples after radiochemotherapy versus primary biopsies of the tumor. Longer metastasis-free survival ( $P = 0.033$ ) and tumor-specific survival ( $P = 0.030$ ) were associated with low E-cadherin [expression](#) in the biopsy. Single-cell growth at the [tumor invasion](#) front was a prognostic factor for longer tumor-specific survival ( $P = 0.021$ ) after radiochemotherapy. Tumor-specific survival was independently predicted using a combination of growth pattern and the Dworak regression grade ( $P = 0.015$ ).

"A combination of growth pattern and tumor regression score (RegPat-Score) showed the highest discriminatory power to identify high-risk patients," the authors writes.

**More information:** [Abstract](#)  
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