

Novel marker may help diagnose aggressive cancers with poor prognosis

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A study published in *The Journal of Pathology* reveals that many cancers that carry a poor prognosis express an altered form of human telomerase reverse transcriptase (hTERT), an enzyme that regulates the expression of multiple genes.

Scientists previously linked a modification called phosphorylation at a

particular location on the hTERT enzyme to [poor prognosis](#) in liver and [pancreatic cancers](#). Now the team has built on this research to show that elevated levels of this phosphorylated hTERT are common in other types of [cancer](#) as well, especially when the cancers have aggressive features.

"We developed a monoclonal antibody and an automated immunostaining system to detect phosphorylated hTERT in tissue samples, thus providing a basis for the development of a novel clinical diagnostic tool to identify patients with aggressive cancer," said lead author Yoko Matsuda, MD, Ph.D., of Kagawa University, in Japan.

More information: Yoko Matsuda et al, Phosphorylation of hTERT at threonine 249 is a novel tumor biomarker of aggressive cancer with poor prognosis in multiple organs, *The Journal of Pathology* (2022). [DOI: 10.1002/path.5876](#)

Provided by Wiley

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