

# Novel marker may help diagnose aggressive cancers with poor prognosis

March 21 2022

---



Credit: Pixabay/CC0 Public Domain

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

Citation: Novel marker may help diagnose aggressive cancers with poor prognosis (2022, March 21) retrieved 11 July 2024 from <https://medicalxpress.com/news/2022-03-marker-aggressive-cancers-poor-prognosis.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--