

# New imaging agent has an appetite for dangerous prostate tumors

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Non-invasive imaging detects prostate cancer earlier than ever before, but can't accurately distinguish between malignant and benign disease. According to Lawson Health Research Institute's Drs. John Lewis and Len Luyt, a new molecular imaging probe could be the answer.

Ghrelin is a growth hormone produced by the stomach and pancreas to stimulate hunger. Malignant [prostate cancer cells](#) are known to consume it at much higher rates than normal [prostate cells](#). The Lawson team believed this could be the key to singling out [aggressive disease](#).

The Lawson team developed a ghrelin-based imaging agent, modifying the structure by decorating it with a fluorescent compound. Next, they tested it on samples from patients with prostate cancer. Results showed the signal was almost 5 times stronger in the malignant cancer cells than in normal prostate cells or benign cancer cells.

"Imaging tests such as PET or MRI are used to diagnose a number of cancers without biopsy, but biopsy is still the best option for prostate cancer," Dr. Lewis says. "This work suggests that imaging using [ghrelin](#) may allow us to perform a non-invasive biopsy to diagnose prostate cancer and potentially detect metastasis earlier."

Provided by Lawson Health Research Institute

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