

Study: Test for rare skin cancer could save lives with early detection

by [Clare McGrane](#) on December 7, 2016 at 8:00 am

Paul Nghiem, lead author of the new study and pioneer of Merkel Cell Carcinoma research. (Fred Hutch Photo / Robert Hood)

Merkel Cell Carcinoma (MCC) is a nasty disease. This rare skin cancer is treatable, but as [Dr. Paul Nghiem](#) explains, treating the initial disease is only the first step.

“Even though you treat it with surgery or radiation, — and there’s no sign of cancer any more by physical exam or by scan — almost half of patients will recur,” Nghiem said, meaning their cancer will reappear without warning. “This is a much higher rate than any of the other skin cancers. And then you’re kind of left scratching your head.”

For decades, doctors have had no way to predict if a patient’s cancer will come back, or a reliable way to find the cancerous tissue if it does.

But that will soon change, due to a new test pioneered by Nghiem and developed over the past five years by dozens of researchers at Seattle’s [Fred Hutchinson Cancer Research Center](#) and the University of Washington.

“We find the test to be really useful because it puts every patient into one of two bins, and that bin tells us how we should best treat them and track them over time,” Nghiem told GeekWire.

The new test was sparked by the work of Fred Hutch virologist Denise Galloway, and works by measuring an antibody that the body produces in response to the virus that causes

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MCC, meaning it can catch even the smallest increase in a patient's cancer cells.

Nghiem is the lead author of a paper summarizing the research done on the test over the past five years, largely orchestrated by doctoral student Kelly Paulson. The paper was published today in the journal *Cancer*.

Nghiem, who heads UW's Division of Dermatology and does clinical research at Fred Hutch, said the test presents a huge change in how doctors approach MCC.

"Prior to using this test, we were basically left up to doing scans," Nghiem said. That method can be tricky because it can only catch cancer once it has grown to a certain size, and also has a high rate of false positives and false negatives.

The new test has a few functions.

The first is to sort patients into two groups. Some patients do not produce the antibody, meaning they face a higher risk of the cancer returning and need regular scans to check for tumors, Nghiem said. They go in group one.

"On the other hand, for the patients who do make these antibodies, we have a built in test that we can run every three months or so to say: is the cancer going away? Are the antibodies decreasing? Or is the cancer coming back, because the antibodies are going up?"

That means the test can reliably catch the recurrence of a patient's cancer much earlier than scans alone, often before it can even be seen on a scan. The procedure is also less expensive than a scan, and limits patients' exposure to potentially harmful materials used in scans, like radiation and

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dyes.

Catching the cancer early can be the difference between life and death for some patients, Nghiem said. He said this new study will help define how, when, and for whom the test should be used, and that he hopes it will encourage more broad usage.

At the moment, the test is regularly used at the SCCA and Fred Hutch, along with a handful of other clinics around the world