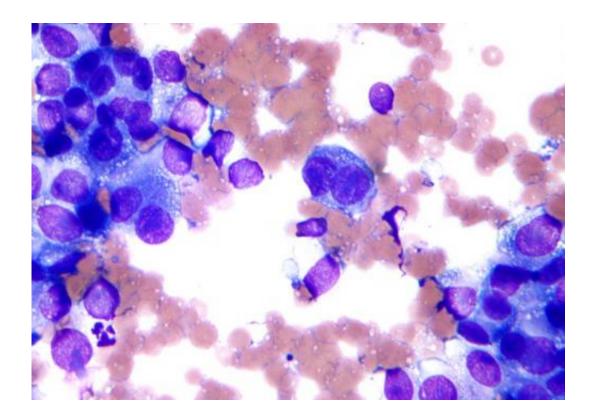


## Can a blood test help diagnose skin cancer?

## April 20 2022



Micrograph of malignant melanoma. Cytology specimen. Field stain. Credit: Nephron/Wikipedia

New research in *Advanced NanoBiomed Research* indicates that testing an individual's blood can reveal the presence of circulating melanoma cells. Such tests may allow patients to forego invasive skin biopsies to determine whether they have skin cancer.

The test uses what's called the Melanoma-specific OncoBean platform



conjugated with melanoma-specific antibodies. Investigators at the University of Michigan showed that the test can be used not only to diagnose melanoma but also to evaluate whether all cancer cells have been successfully removed after skin cancer surgery.

"This is the first comprehensive study of circulating <u>tumor cells</u>—or CTCs—to evaluate the efficacy of surgery using microfluidic systems in melanoma, including changes in the number of CTCs, CTC cluster configuration, and gene expression profiling," said first author, Yoon-Tae Kang, Ph.D. "CTCs have the potential to pinpoint treatment resistance and recurrence, and can be a valuable biomarker to non-invasively monitor for disease progression," added corresponding author Sunitha Nagrath, Ph.D.

**More information:** Yoon-Tae Kang et al, Isolation of Circulating Tumor Cells to Diagnose Melanoma and Evaluate the Efficacy of Surgical Resection Using Melanoma-Specific Microsystem, *Advanced NanoBiomed Research* (2022). DOI: 10.1002/anbr.202100083

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