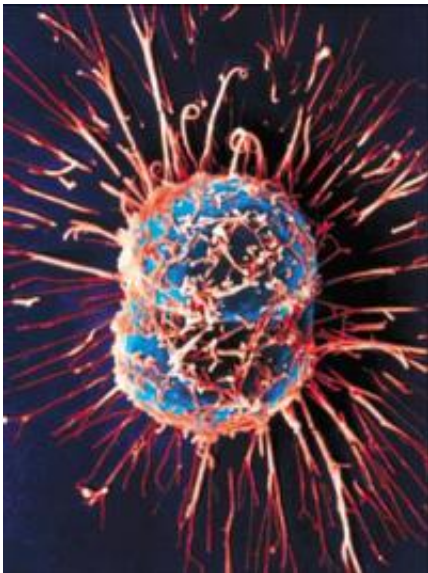


Cancer cells play hide-and-seek with immune system

June 29 2016



Dividing Cancer Cells. Credit: University of Birmingham

When the immune system attacks cancer, the tumour modifies itself to escape the immune reaction. Researchers at LUMC published on this subject in *Nature* on 28 June.

The researchers discovered that as a result of the immune reaction new tumour cells are formed that have far fewer or even none of the DNA modifications that the [immune system](#) can recognise. This is how the tumour tries to escape the [immune reaction](#). However, the immune system can learn to recognise new DNA modifications.

Other treatment methods

By treating [cancer](#) patients with a different form of immunotherapy, it should be possible to switch off the modified tumour cells as well, the researchers conclude. Immunotherapy is a cancer treatment whereby the patient's own immune system is activated to trace and destroy cancer cells.

More information: Els M. E. Verdegaal et al. Neoantigen landscape dynamics during human melanoma–T cell interactions, *Nature* (2016). [DOI: 10.1038/nature18945](https://doi.org/10.1038/nature18945)

Provided by Leiden University

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