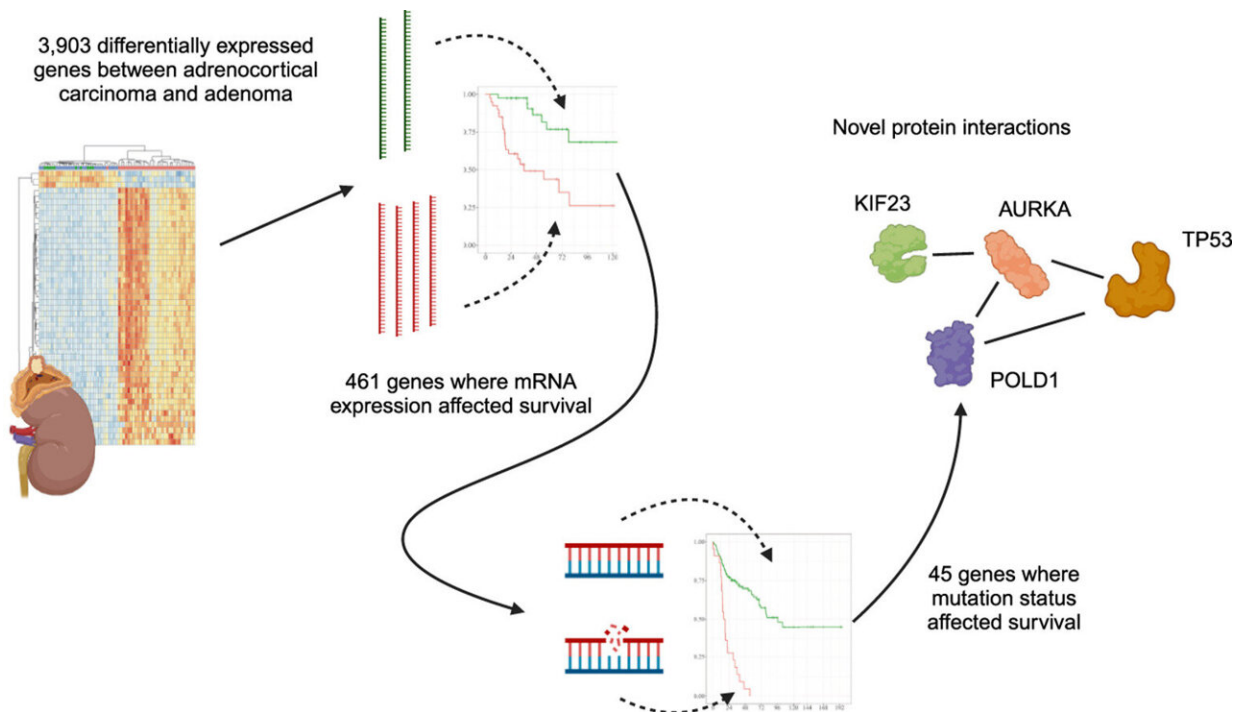


New genetic markers for adrenal cancer may predict survival

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Credit: *ESMO Open* (2024). DOI: 10.1016/j.esmoop.2024.103617

A new study from Karolinska Institutet shows that 45 genes may play a crucial role in the prognosis of patients with adrenal cancer. The [findings](#), published in the journal *ESMO Open*, give hope for a better diagnostic tool than is currently available.

Adrenal cancer is a rare but aggressive cancer with few [treatment options](#). The incidence is one to two people per million per year and the median survival is about three to four years.

In the new study, researchers have made an important finding in the fight against the disease. The researchers have discovered a group of 45 genes that strongly correlate with [patient survival](#).

"Our research shows that this [gene signature](#) can help us identify which patients are at higher risk of poor outcomes. The patients who had the gene signature lived on average four times shorter than those who did not have it," explains first author Alexander Sun-Zhang, Ph.D. student at the Department of Oncology-Pathology, Karolinska Institutet.

Targets for future treatments

Sequencing data from 162 patients with adrenal cortical cancer were analyzed in combination with survival data from public databases. In this way, the researchers were able to filter out the relevant genes.

"The results are an important step in understanding how we can fight this cancer. It is particularly exciting that some of these genes may become targets for future treatments," says Sun-Zhang.

The [research](#) team now plans to continue their work by mapping the genetics of adrenal cortex cancer in children and investigating innate mutations that may contribute to tumor development.

"It is our hope that these new insights will lead to better treatments and improved survival for patients," concludes Sun-Zhang.

More information: A. Sun-Zhang et al, Comprehensive genomic analysis of adrenocortical carcinoma reveals genetic profiles associated

with patient survival, *ESMO Open* (2024). [DOI: 10.1016/j.esmoop.2024.103617](https://doi.org/10.1016/j.esmoop.2024.103617)

Provided by Karolinska Institutet

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