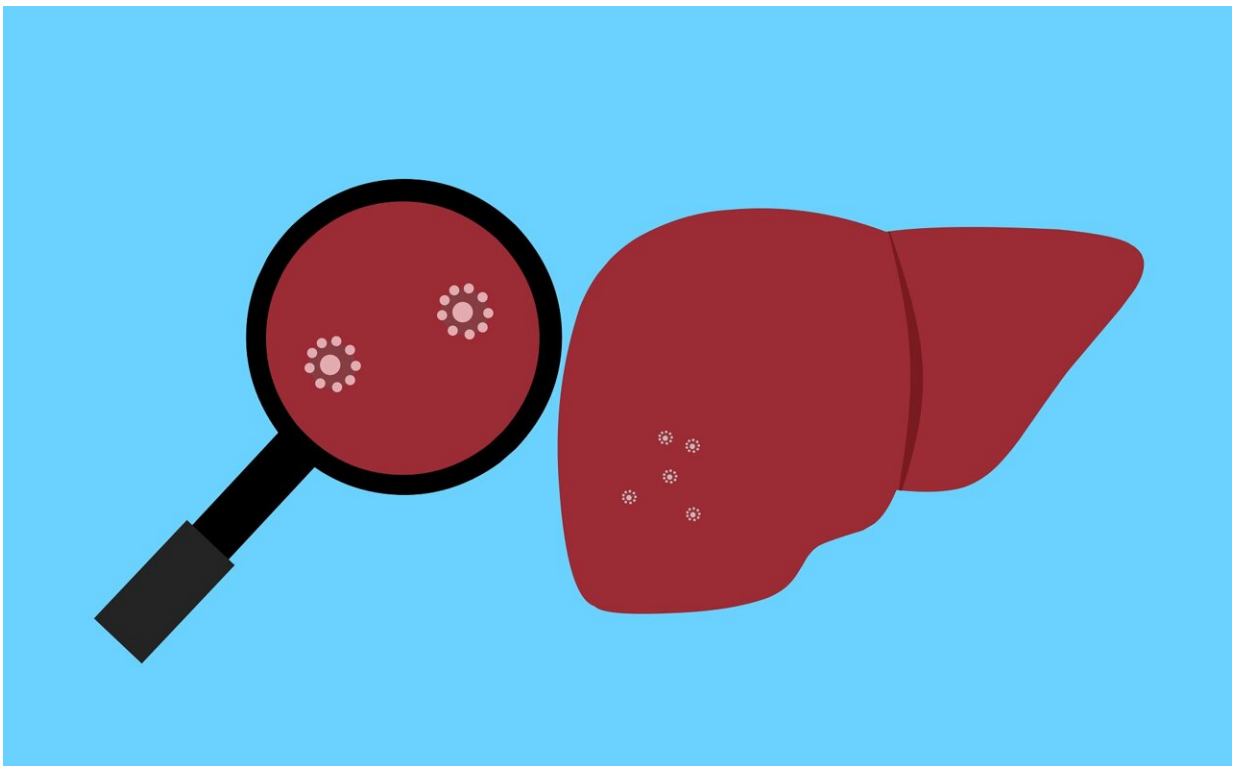


New thesis on biomarkers for hepatocellular carcinoma

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Robin Zenlander from the Gastroenterology and Rheumatology Unit at the Department of Medicine, Huddinge, is defending his thesis titled "[Biomarkers in hepatocellular carcinoma](#)," on 13 June, 2024.

"Patients with liver cirrhosis have an increased risk of developing primary liver cancer in the form of [hepatocellular carcinoma](#) (HCC). We have searched for new [biomarkers](#), both in blood and in liver cancer tissue, mainly to be used for early discovery of HCC, and for predicting the risk of recurrence after [surgical treatment](#)," Zenlander says.

"In blood we have found a new protein, thioredoxin reductase 1 (TXNRD1), which could be used for screening of HCC. By combining TXNRD1 with today's most studied biomarkers alpha-fetoprotein (AFP) and des-gamma carboxyprothrombin (DCP), you can improve the performance of those markers for early discovery of HCC in [risk patients](#) with liver cirrhosis.

"In addition, we have found in liver cancer tissue that micro-RNAs, small genetic fragments that can control the cell's gene expression, that could improve the prediction of the risk of a recurrence in HCC after surgical treatment.

"Early detection of HCC is crucial for being able to offer curative treatment options. If one can increase the percentage of small tumors that are detected early in high-risk patients with [liver cirrhosis](#), survival can be improved.

"In addition, by better predicting which patients are at the highest risk of recurrence after surgical treatment, extra follow-up can be targeted to those patients where the benefit will be the highest.

"We intend to continue studying the biomarkers found utilizing larger prospective patient cohorts and combining biomarkers in blood with new radiological methods such as abbreviated MR protocols, with the overall aim of improving survival for HCC patients."

More information: Biomarkers in hepatocellular carcinoma.
openarchive.ki.se/xmlui/handle/10616/49142

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