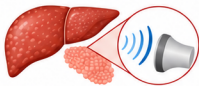


Can changes in liver stiffness tell us how alcohol-related liver disease is progressing?



Liver stiffness is a measure of how firm the liver is, which can be assessed non-invasively using imaging techniques such as transient elastography (e.g. FibroScan®).

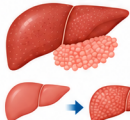


Researchers from MICROB-PREDICT studied how liver stiffness can help predict and monitor the risk of decompensation and death in patients with alcohol-related liver disease.



Higher liver stiffness levels were associated with a higher risk of decompensation and mortality.

1 What is alcohol-related liver disease?



Long-term and heavy alcohol use can damage the liver, leading to inflammation, scarring (fibrosis) and, in some people, cirrhosis.

Healthy liver → **Liver fibrosis (scarring)** → **Cirrhosis**

In advanced disease, the liver can no longer work properly, which can lead to complications (decompensation) and a higher risk of death.

2 What is liver stiffness and how is it measured?



Liver stiffness reflects how firm the liver is. It can be measured easily and non-invasively using imaging techniques such as transient elastography (e.g. FibroScan®).

Higher liver stiffness values usually indicate more scarring in the liver and more advanced disease.

3 What did the researchers do?



Analysed data from a large group of patients with alcohol-related liver disease who were followed over time.



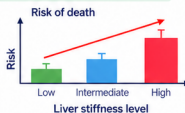
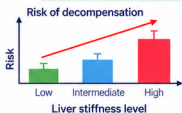
Measured liver stiffness at baseline and during follow-up using transient elastography (FibroScan®).



Investigated whether liver stiffness could predict the risk of future decompensation (liver-related complications) and death, and whether changes in liver stiffness over time provided additional prognostic information.

4 What did they find?

Patients with higher liver stiffness had a higher risk of decompensation and death.



5 What does this mean for patients?



Liver stiffness can help identify patients at higher risk of complications and death.



Repeated measurements over time can provide additional information about how the disease is progressing.



This information may help guide closer monitoring and more personalised care.



Monitoring liver stiffness could help identify high-risk patients earlier and support more tailored treatment and follow-up.

6 Is liver stiffness already used in clinical practice?



Yes.

Liver stiffness measurement is already widely used in clinical practice to assess liver fibrosis and help guide decision-making.



This study shows that it can also help predict the risk of decompensation and death in patients with alcohol-related liver disease.

7 What is the bigger picture?



This research highlights the value of a simple, non-invasive test in understanding disease progression and improving risk assessment in alcohol-related liver disease.



Better risk stratification could help ensure that patients at highest risk receive appropriate monitoring and timely treatment.

8 About the research



Title of Publication: Using liver stiffness to predict and monitor the risk of decompensation and mortality in patients with alcohol-related liver disease Thorhaug K, Semmler G, Johansen S, et al. (2024) Journal of Hepatology, 81(1): 23-32.



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