gutflix
GI learning, personalised

Summary

BIOLOGICAL AGEING ACCELERATION, GENETIC SUSCEPTIBILITY AND RISK OF CHRONIC LIVER DISEASES: TWO OBSERVATIONAL COHORT STUDIES

Hao Chen

UEG Week Berlin 2025 | Poster

Hepatobiliary

October 6, 2025

Accelerated biological ageing, measured by deviation between phenotypic age and chronological age, was independently associated with increased risk of alcoholic liver disease, metabolic dysfunction-associated steatotic liver disease, and liver fibrosis/cirrhosis in two large cohort studies.

KEY POINTS

- In the UK Biobank cohort, accelerated PhenoAge was associated with more than doubled risk of alcoholic liver disease (HR 2.29, 95% CI 2.03-2.58) and liver fibrosis/cirrhosis (HR 2.22, 95% CI 2.01-2.46), and modestly increased risk of metabolic dysfunction-associated steatotic liver disease (HR 1.10, 95% CI 1.04-1.16).
- Similar associations were observed in the All of Us cohort, with accelerated PhenoAge linked to alcoholic liver disease (HR 1.97, 95% CI 1.00-3.88), metabolic dysfunction-associated steatotic liver disease (HR 1.35, 95% CI 1.15-1.58), and liver fibrosis/cirrhosis (HR 2.19, 95% CI 1.48-3.22).
- The association between accelerated biological ageing and chronic liver diseases remained significant across polygenic risk score levels and was independent of genetic risk.
- Participants with both high genetic risk and accelerated biological ageing exhibited the highest risk of developing chronic liver diseases compared to those with biologically younger ages and low genetic risk.
- This research may be most relevant to clinicians and researchers interested in risk stratification for chronic liver disease using integrated biological ageing metrics alongside genetic susceptibility markers.

VIEW THIS CONTENT ON GUTFLIX

https://gutflix.eu/search/d/e978db22-a814-11f0-bd54-0242ac140006

AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.