

WASHINGTON **D.C.** 

## The Best of The Liver Meeting<sup>®</sup>

#### LIVER AND BILIARY CANCER



#### About the program:

Best of The Liver Meeting 2022 was created by the Scientific Program Committee for the benefit of AASLD members, attendees of the annual conference, and other clinicians involved in the treatment of liver diseases. The program is intended to highlight some of the key oral and poster presentations from the meeting and to provide insights from the authors themselves regarding implications for patient care and ongoing research.

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## Cell-free DNA fragmentomes for detection of liver cancer

#### **Objective**

To develop a high-performing and cost-effective approach for cancer detection by examining genome-wide cfDNA fragmentation features, encompassed in fragmentomes.

#### **Methods**

We used a cross-validated machine learning model that incorporated genome-wide fragmentome features from blood samples of 391 individuals, including 47 individuals with HCC and 344 without cancer.

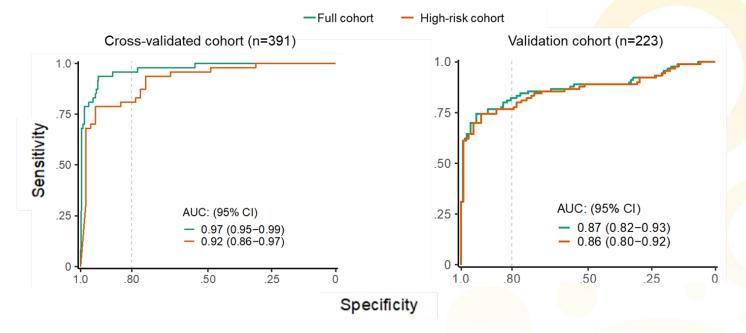
#### **Main Findings**

At 90% specificity, the overall sensitivity of the approach for detecting cancer was 94% among all individuals and 79% among high-risk individuals.

#### Conclusions

We demonstrate the use of genome-wide cfDNA fragmentome features to detect HCC with high sensitivity and specificity, including in early-stage disease (BCLC 0/A).

Foda Z, et al., Abstract 201.



Machine learning model detects liver cancer with high sensitivity and specificity. Receiver operating characteristic (ROC) curves for the full cross-validated cohort and the fixed model applied to the validation cohort for full and high-risk cohorts.



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