



FIBROSIS STAGING IN YOUNG PWUD WITH HCV IS UNLIKELY TO CHANGE MANAGEMENT

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Introduction

- In the United States, hepatic fibrosis testing is recommended prior to hepatitis C virus (HCV) treatment¹
- HCV-related hepatic fibrosis takes two to three decades to develop and develops faster in those age ≥ 50 years¹
- A RCT, OR-HOPE, used phlebotomy to screen rural people who use drugs for active HCV and biomarkers of hepatic fibrosis.²
- **Question:** Among rural-dwelling people who use drugs (PWUD) is there an age threshold at which fibrosis is unlikely?

Methods

- PWUD screened for enrollment in a telemedicine HCV treatment trial in 5 rural Oregon counties²
- Inclusion: Consented for phlebotomy; detectable HCV
- Exclusion: Incomplete laboratory data
- Main outcome: Equivocal or high biomarkers for fibrosis; composite outcome of APRI ≥ 0.5 and FIB 4 ≥ 1.45 .
- Analysis in SPSS v 28

Results

n=226

Mean Age

- 41.6 years (Range 19-70)

Gender

- Female 34.1%
- Male 55.8%
- Other 10.2%

Race/ Ethnicity

- Black 10.2%
- American Indian 0.9%
- Mixed Race 2.2%
- White 79.2%
- Hispanic 4.9%

FIB-4 ≥ 1.45

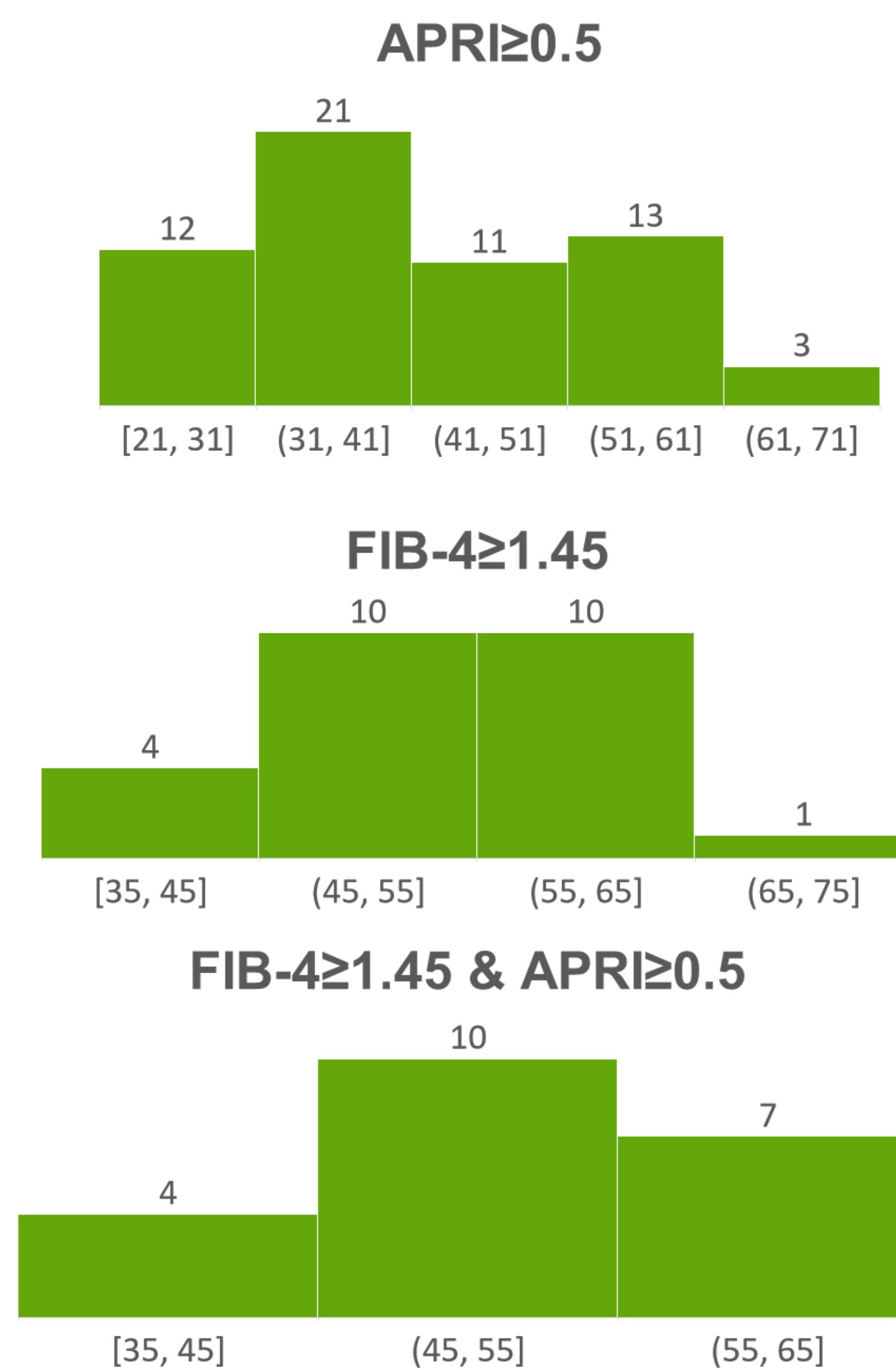
- n=25

APRI ≥ 0.5

- n=60

FIB-4 ≥ 1.45 & APRI ≥ 0.5

- n=21



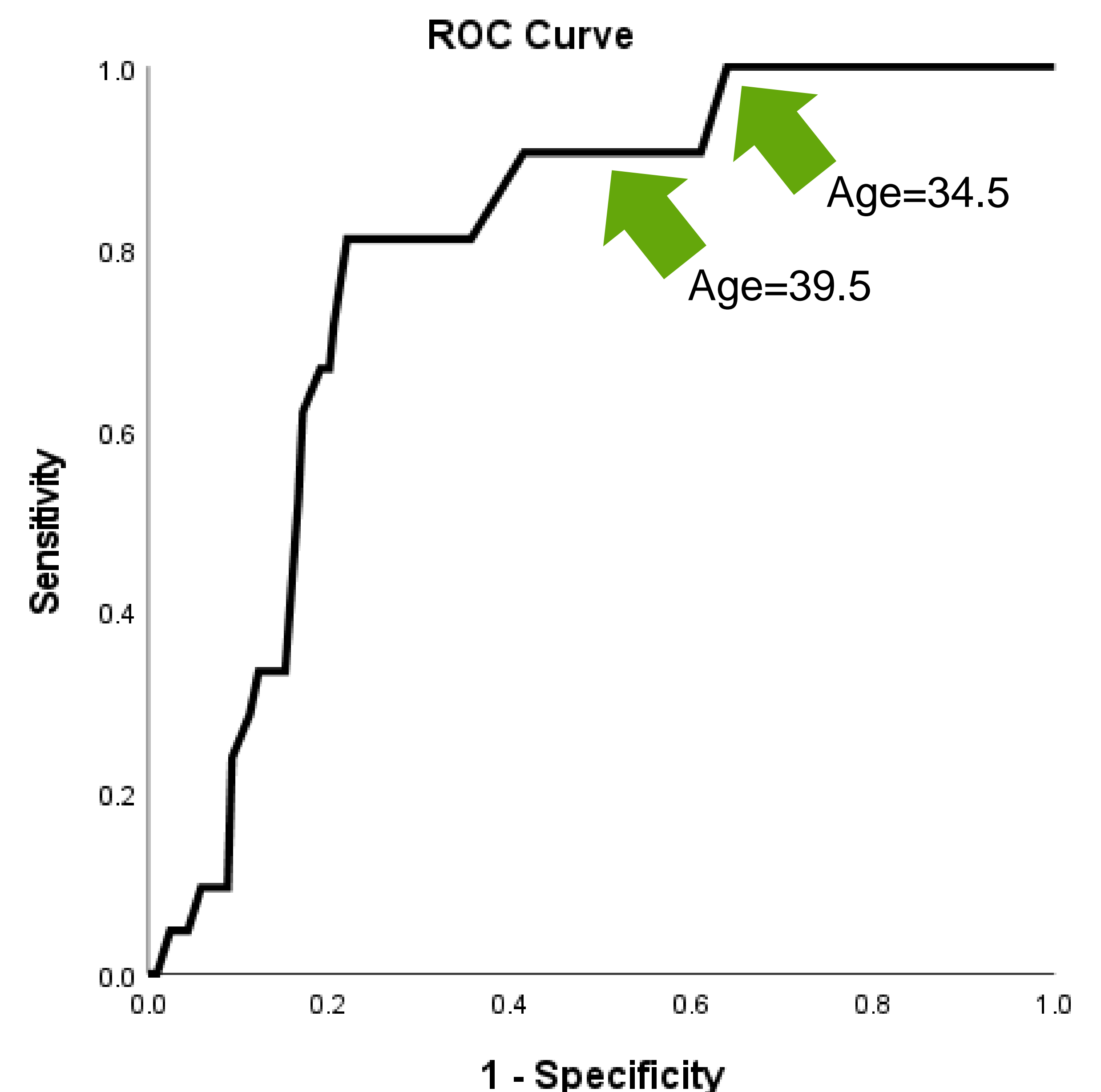
Above: Histograms of age distribution among those with APRI ≥ 0.5 , FIB-4 ≥ 1.45 , and both markers elevated.

Below: Receiver operator curve age and composite outcome of fibrosis.

Area Under the Curve (AUC)= 0.793

Age <35: 0 cases, Sensitivity 100%, Specificity 36%

Age <40: 2 cases, Sensitivity 90.5%, Specificity 54%



Conclusions

- Hepatic fibrosis was uncommon
- Age has reasonable discrimination to predict hepatic fibrosis
- Limitations: diagnostic accuracy of FIB4 and APRI³; transient elastography is difficult to access in rural areas⁴
- Completing fibrosis staging is a frequent barrier to HCV treatment initiation in certain PWUD⁵
- In PWUD age <40 years, pre-treatment fibrosis assessment **may be low yield, may not influence clinical management**⁶
- **Treatment initiation prior to completing fibrosis staging could be considered in younger PWUD**

References

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Disclosures of Interest

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