**INTRODUCTION**

- Liver fibrosis assessed by liver biopsy has been shown to predict liver outcomes in patients with nonalcoholic fatty liver disease (NAFLD) and remains the gold standard in phase 3 trials. However, the clinical utility of liver biopsy in assessing liver fibrosis is limited, in that the procedure is invasive, expensive, and associated with a risk of complications.

**AIM**

- To investigate the association between MRE and clinical liver events/death in NAFLD patients.
- To identify the cut-offs to predict clinical liver events in a large cohort of NAFLD patients from both Cedars-Sinai and the Texas Liver Institute.

**METHOD**

- A multi-center study of NAFLD patients from Texas and California who underwent MRE were recruited from May 2016 to June 2018. Data from 311 patients were included in the analysis, with 297 patients having both clinical and MRE data available for analysis.

**RESULTS**

- The ROC curve for MRE liver stiffness to determine decompensation was used for MRE liver stiffness to determine decompensation.
- The sensitivity and specificity of liver stiffness for decompensation were 89.6% and 66.0%, respectively.

**CONCLUSIONS**

- This novel study demonstrated that in NAFLD patients higher liver stiffness as measured by MRE cut-off of 6.48 kPa was associated with overall decompensation and mortality in a large multicenter cohort.
- Our study identified different MRE cut-offs associated with individual clinical liver events.
- These MRE cut-offs could allow physicians to identify NAFLD patients at higher risk of liver-related complications and eventually death.
- Further long-term prospective studies are warranted to confirm our results.

**REFERENCES**