DDW2023 Digestive Disease Week®
MAY 6-9, 2023 | CHICAGO, IL
EXHIBIT DATES: MAY 7-9, 2023

HEMODYNAMIC MEASUREMENT OF QUANTITATIVE LIVER FUNCTION BY HEPATIQ DETECTS CLD AND DIFFERENTIATES FROM ACUTE CAUSES OF JAUNDICE

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METHODS

1. Fed Sulfur colloid liver-spleen scan
2. SPECT analysis
3. HEPATIQ image processing for quantitative Parameters
4. Clinical database, QLSS, Ultrasound, Blood tests, Biopsy

JAUNDICED PATIENTS

Bilirubin > 2 mg% (total 70 patients)

1. **Advanced CLD (50):** Liver biopsy, Nodular liver surface by CT or MRI, Collaterals
2. **No advanced CLD (20):** (A) Acute: Acute hepatitis - resolved with time (biologics 3, flare HBV 2, Unknown 1), Biliary obstruction – resolved with surgery (2) (B) Gilbert's 12

CAUSE OF JAUNDICE

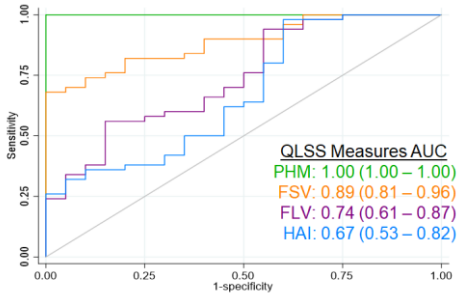
Chronic: ALD – 26, HCV – 7, Autoimmune – 2, NASH – 4, Cryptogenic cirrhosis – 10, Misc – 1

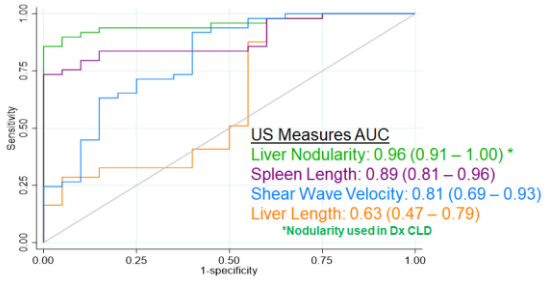
Acute: Acute Hepatitis – 6, Biliary Obstruction – 2, Gilbert's Syndrome - 12

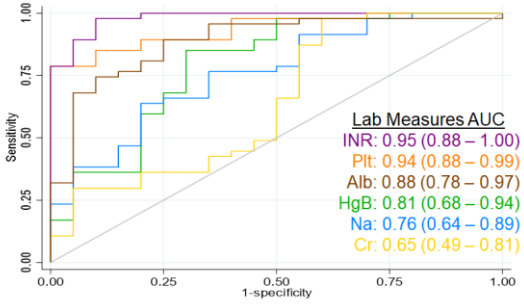
	Odds Ratio	p-value
QLSS Measures		
PHM	NA	NA
fSV	102.6	0.002
fLV	2.32	0.033
HAI	0.65	0.148
US Measures		
SWV	6.42	0.001
Spleen Length	23.9	0.008
Liver Length	0.79	0.385
Lab Measures		
Alb	0.22	<0.001
INR	101.3	<0.001
Plt	0.06	<0.001
HgB	0.32	0.002
Na	0.37	0.016
AST	0.47	0.184
Tbili	1.61	0.192
ALT	0.01	0.294
Alk	1.08	0.783
Dbili	1.07	0.804
Cr	0.99	0.982

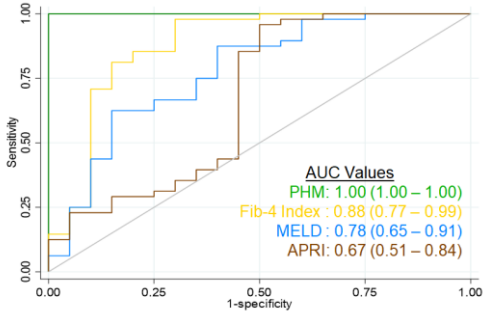
RESULTS

PHM Perfectly Detected CLD in patients with Jaundice
Ultrasound Measures are less effective in detecting CLD
Routine Liver Tests are useful
PHM vs other Clinical Metrics to Detect CLD in Patients with Jaundice









CONCLUSIONS

- The intra-hepatic hemodynamic abnormality of CLD as measured by PHM separated causes of jaundice into acute vs chronic
- LFT were helpful, but not as effective as PHM
- US was helpful, but not as effective as PHM
- In acute jaundice, the fLV could shrink to small volumes and regenerate rapidly with recovery. This may be clinically useful in determining the severity of the acute attack.