



NASH Explore

AIM  **NASH**

Publications & Research

Advancing the understanding of Liver Diseases through Digital Pathology

Manuscripts

Posters

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Manuscripts

2023

AI-based histologic scoring enables automated and reproducible assessment of enrollment criteria and endpoints in NASH clinical trials

Authors: Iyer et al.

Integration of deep learning-based histopathology and transcriptomics reveals key genes associated with fibrogenesis in patients with advanced NASH

Authors: Conway, Pouryahya et al.

Validation of Digital Pathology Platform for MASH

Authors: Pulaski et al.

2022

Self-training of Machine Learning Models for Liver Histopathology: Generalization under Clinical Shifts

Authors: Li et al.

Multi stain graph fusion for multimodal integration in pathology

Authors: Dwivedi et al.

2021

A Machine Learning Approach to Liver Histological Evaluation Predicts Clinically Significant Portal Hypertension in NASH

Authors: Bosch et al.

A Machine Learning Approach Enables Quantitative Measurement of Liver Histology and Disease Monitoring in NASH

Authors: Taylor-Weiner et al.

Combination therapies including cilofexor and firsocostat for bridging fibrosis and cirrhosis due to NASH

Authors: Loomba et

Posters

2023

Characterizing the histologic implications of resmetirom-induced liver volume reduction using artificial intelligence-powered digital pathology

Authors: Mistry et al.

2022

Variability in Liver Biopsy Assessment: Data from the Pegzofermin Phase 1b/2a Study in Subjects with Non-Alcoholic Steatohepatitis (NASH)

Authors: Loomba et al.

Steatosis reduction assessed by MRI-PDFF was consistent with ML evaluation in patients with NASH cirrhosis

Authors: Loomba et al.

Comparison of the effects of semaglutide on liver histology in patients with non-alcoholic steatohepatitis cirrhosis between machine learning model assessment and pathologist evaluation

Authors: Loomba et al.

2022 *Continued*

Quantitative Multimodal Anisotropy Imaging enables machine learning prediction of NASH CRN fibrosis stage without manual annotation

Authors: Tahir et al.

Retrospective AI-based Measurement of NASH Histology (AIM-NASH) Analysis of Biopsies From Phase 2 Study of Resmetirom Confirms Significant Treatment-induced Changes in Histologic Features of Nonalcoholic Steatohepatitis

Authors: Harrison et al.

Machine learning-enabled continuous scoring of histologic features facilitates prediction of clinical disease progression in patients with non-alcoholic steatohepatitis

Authors: Iyer et al.

Posters *Continued*

2021

Liver Biopsy Graph Neural Networks for Automated Histologic Scoring using the NASH CRN System

Authors: Wang et al.

Minimizing Variability and Increasing Concordance for NASH Histological Scoring in NASH Clinical Trials

Authors: Sanyal et al.

Artificial intelligence-powered digital pathology model supports that fibrosis is reduced by semaglutide in patients with NASH

Authors: Harrison et al.

Comparison of manual vs machine learning approaches to liver biopsy scoring for NASH and fibrosis: a post hoc analysis of the FALCON 1 study

Authors: Shevell et al.

Quantitative Assessment of NASH Pathologies in 152 Baseline H&E Slides from a Phase 2 trial using PathAI Machine Learning Algorithm

Authors: Cable et al.

2020

Integration of Machine Learning-Based Histopathology and Hepatic Transcriptomic Data Identifies Genes Associated With Portal Inflammation and Ductular Proliferation as Predictors of Disease Progression in Advanced Fibrosis Due to NASH

Authors: Pouryaha et al.

Validation of a Machine Learning-Based Approach (DELTA Liver Fibrosis Score) for the Assessment of Histologic Response in Patients with Advanced Fibrosis due to NASH

Authors: Taylor-Weiner et al.

A Machine Learning Model Based on Liver Histology Predicts the Hepatic Venous Pressure Gradient in Patients With Compensated Cirrhosis Due to Nonalcoholic Steatohepatitis

Authors: Bosch et al.

Machine Learning Identifies Histologic Features Associated With Regression of Cirrhosis in Treatment for Chronic Hepatitis B

Authors: Wang et al.

2020 *Continued*

Machine Learning Models Accurately Interpret Liver Histology and Are Associated With Disease Progression in Patients With Primary Sclerosing Cholangitis

Authors: Travis et al.

Machine Learning Models Identify Novel Histologic Features Predictive of Clinical Disease Progression in Patients With Advanced Fibrosis Due to Nonalcoholic Steatohepatitis

Authors: Pokkalla et al.

A Deep Learning Approach to Analysis of MRCP Images Predicts Clinical Events and Progression to Cirrhosis in Patients With Primary Sclerosing Cholangitis

Authors: Prakash et al.

2019

Machine Learning Fibrosis Models Based on Liver Histology Images Accurately Characterize the Heterogeneity of Cirrhosis Due to Nonalcoholic Steatohepatitis

Authors: Younossi et al.

Oral Presentations

2023

Toward validated platforms and AI-powered digital pathology tools for evaluation of NASH histology in clinical trials

Authors: Iyer and Wack

Analytical and Clinical Validation of AIM-NASH a Digital Pathology Tool for Artificial Intelligence-based Measurement of Nonalcoholic Steatohepatitis Histology

Authors: Harrison et

Artificial intelligence-based assessment of liver pathology in alpha-1 antitrypsin deficiency

Authors: Iyer et al.

2022

Exploratory analyses of NASH histology using CRN scores derived from a multi-stain machine learning method

Authors: Abel et al.

2021

AI-based histologic measurement of NASH (AIM-NASH): A drug development tool for assessing clinical trial endpoints

Authors: Carrasco-Zevallos et al.

AI-Based Assessment of NASH Histology for Treatment, Monitoring, and Risk Stratification

Authors: Carrasco-Zevallos et al.

AI-Powered Analysis of NASH Pathology: Integration into NASH Clinical Development

Authors: Beck et al.

2020

Machine Learning Enables Quantitative Assessment of Histopathologic Signatures Associated with ALT Normalization in Chronic Hepatitis B Patients Treated with Tenofovir Disoproxil Fumarate (TDF)

Authors: Shukla et al.

2020 *Continued*

AI-powered computational pathology for liver diseases

Authors: Carrasco-Zevallos et al.

Safety and Efficacy of Combination Therapies Including Cilofexor/ Firsocostat in Patients With Bridging Fibrosis and Cirrhosis Due to NASH: Results of the Phase 2b ATLAS Trial

Authors: Loomba et al.

2019

Machine learning models accurately interpret liver histology in patients with nonalcoholic steatohepatitis (NASH)

Authors: Pokkalla et al.