## S+ SimulationsPlus



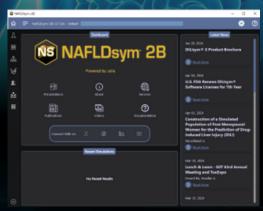
**Predict and Prevent Metabolic Dysfunction-Associated Fatty Liver Disease and MASH** 

## **Key features of NAFLDsym** v2B within Julia include:

- Integration with a modern C++ based graphical user interface (GUI)
- Integration with the open-source Julia Scientific and Machine Learning (SciML) toolkit to solve simulations efficiently
- Results viewer that can open previously exported results files
- Pre-compiled Julia dependencies so users do not need to install a separate Julia environment
- An interactive console application for editing and appending to existing NAFLDsym QSP model equations

## **Sound Science**

- Includes steatosis, lipotoxicity, inflammation, and fibrosis
- Is used to evaluate the efficacy potential of new drug candidates to treat metabolic dysfunction-associated fatty liver disease (MAFLD) and metabolic dysfunction-associated steatohepatitis (MASH)
- Can be used to better understand MAFLD/MASH pathophysiology, progression, and treatment mechanisms
- DILIsym Services has leveraged its long standing expertise in liver physiology and metabolic diseases to develop NAFLDsym
- Successful simulation of more than 30 MAFLD/MASH compounds or targets within drug development to date



NAFLDsym predicts efficacy via the intersection between exposure, PD, and inter-patient pathophysiologic variability.

## **Application Driven**

- Optimize clinical trial protocols by determining favorable dosing paradigms and outcome measurement frequency
- Evaluate targets and/or specific compounds utilizing key laboratory and/or clinical data describing DMPK and pharmacodynamic characteristics
- Evaluate combination therapy approaches
- Compare efficacy in different patient groups (i.e., stratification by NAS, by fibrosis score)
- Prioritize compounds and targets
- Can evaluate potential treatments administered to patients also on weight loss drugs







