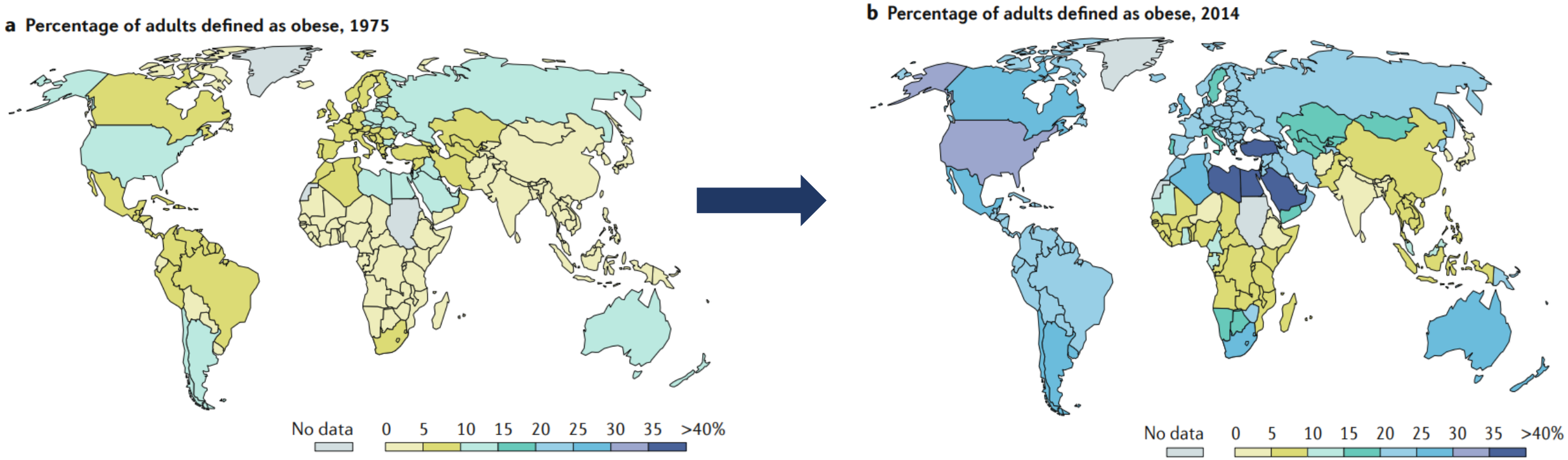
Mechanism of thiamine-Semaglutide alleviating MAFLD in mice

Speaker: Wang Zeng liming

Supervisor: Prof.Tang

Background

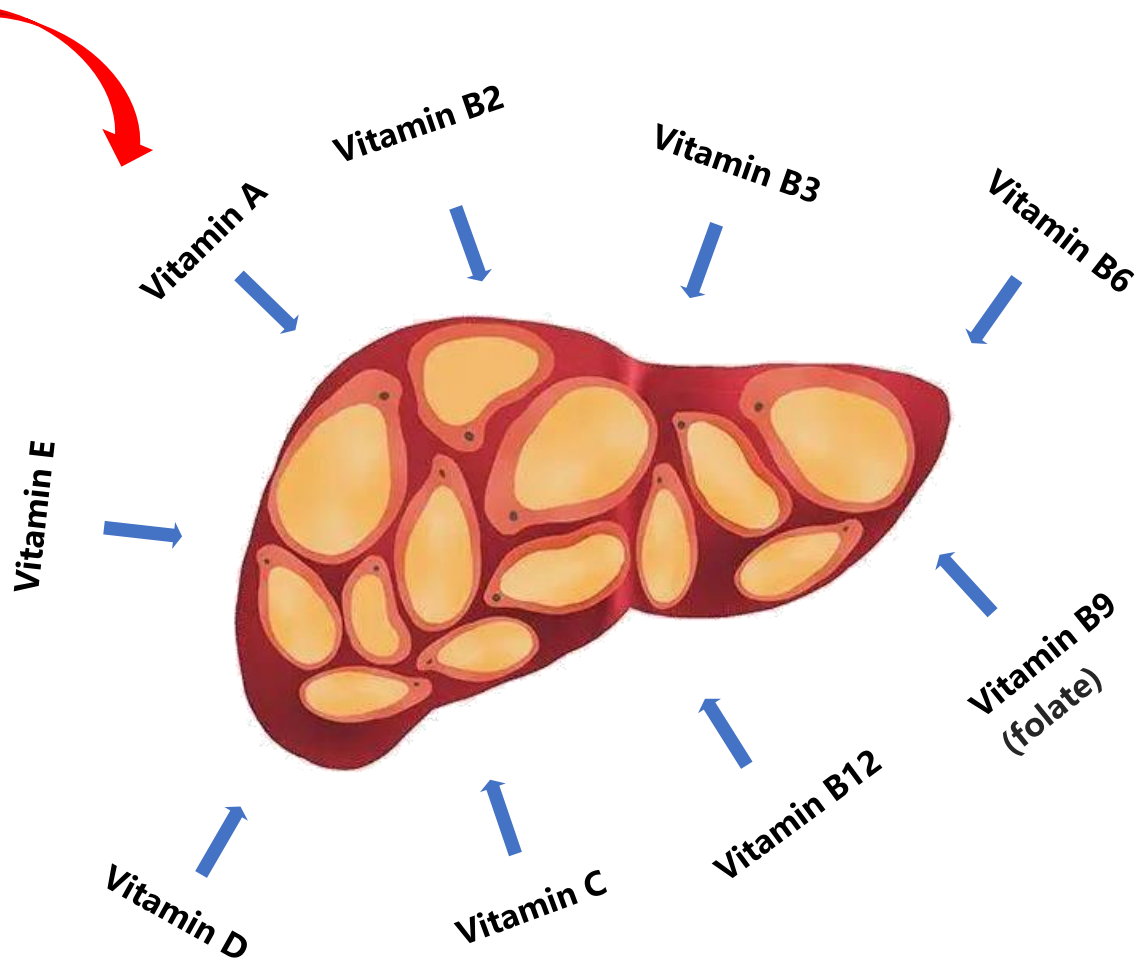
Epidemiological study of metabolically associated fatty liver disease



BLUHER M. Obesity: global epidemiology and pathogenesis [J]. Nat Rev Endocrinol, 2019, 15(5): 288-98.

Background

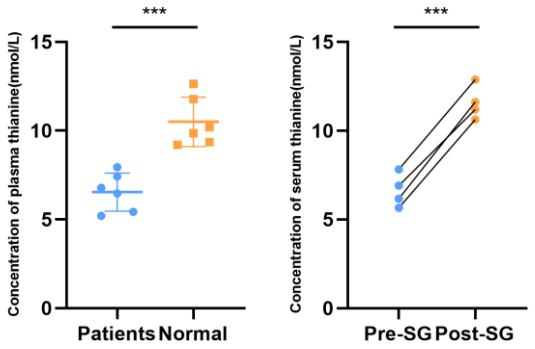
Research status of vitamin in metabolically related fatty liver disease

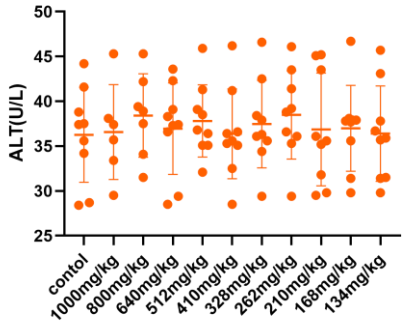


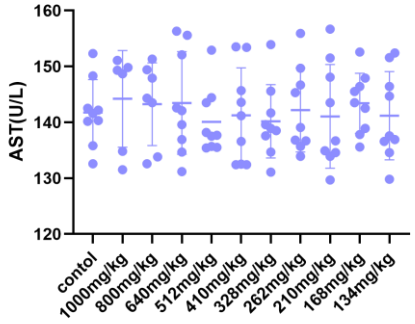
TRIPATHI M, SINGH B K, ZHOU J, et al. Vitamin B(12) and folate decrease inflammation and fibrosis in NASH by preventing syntaxin 17 homocysteinylation [J]. J Hepatol, 2022, 77(5): 1246-55

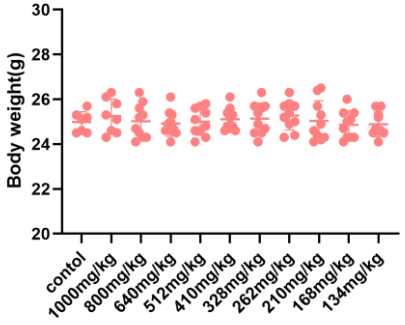
Result

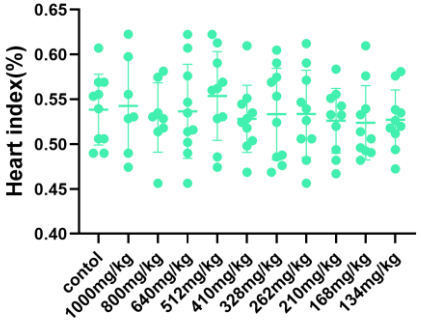
Thiamine was low expression in serum of MAFLD patients (acute toxicity test)

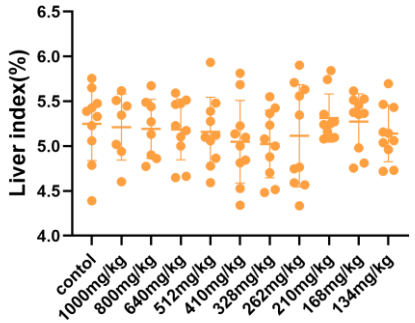


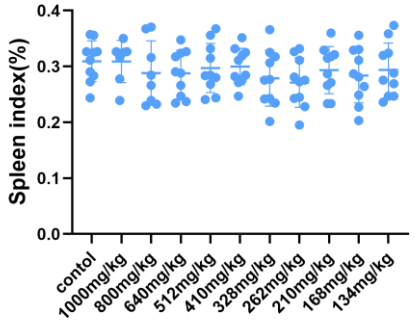


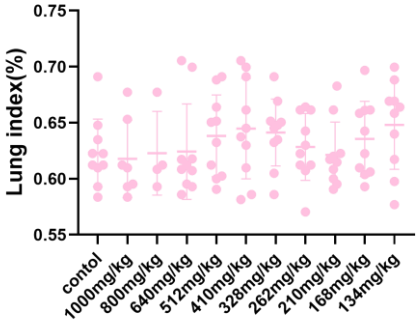


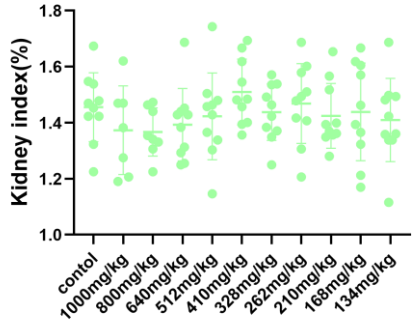


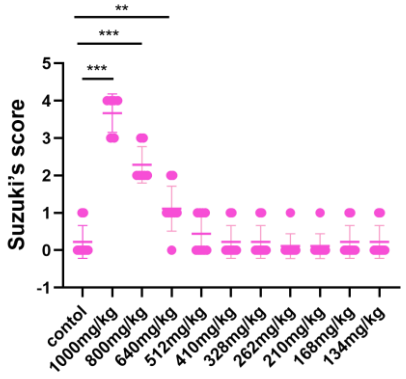


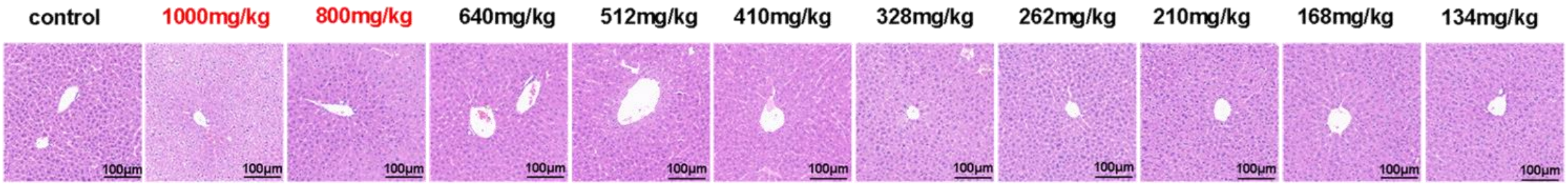






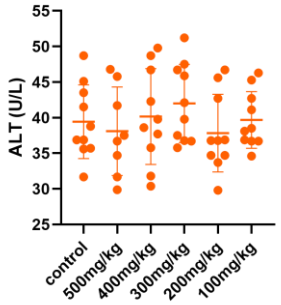


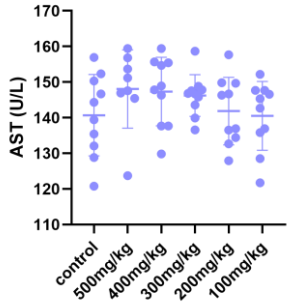


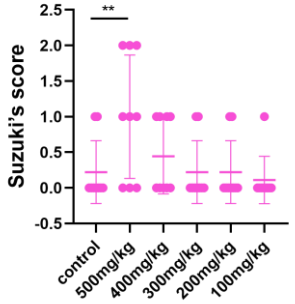


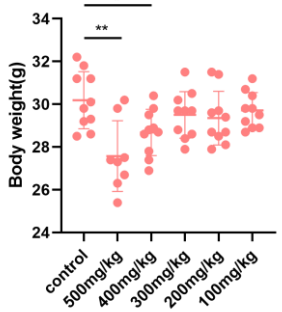
Result

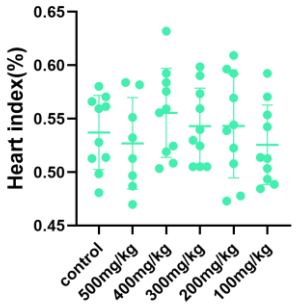
Thiamine was low expression in serum of MAFLD patients (Subchronic toxicity test)

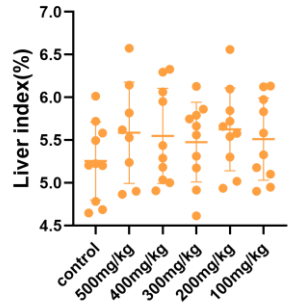


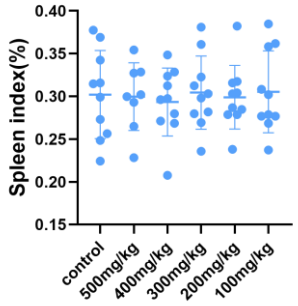


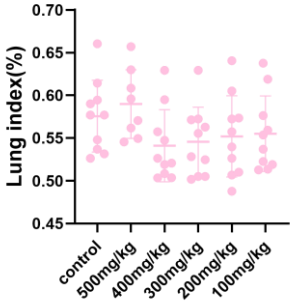


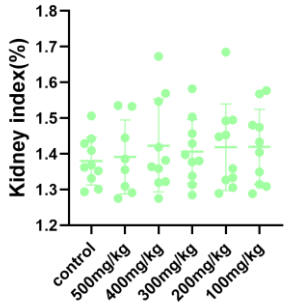


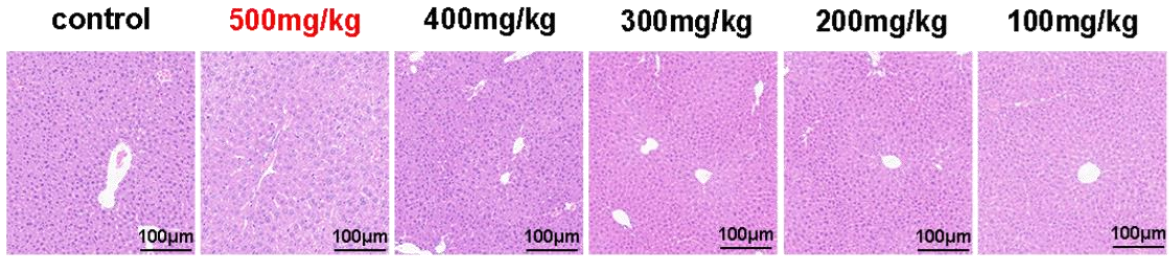






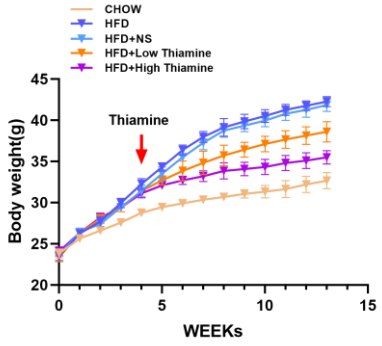


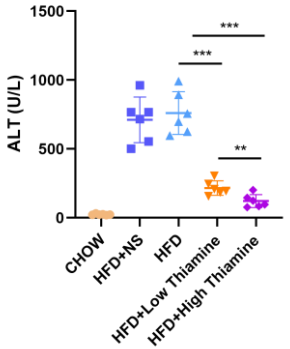


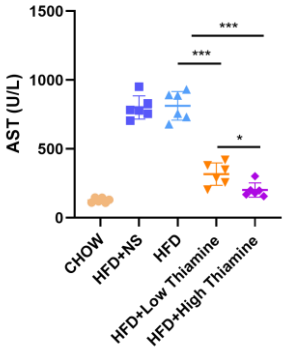


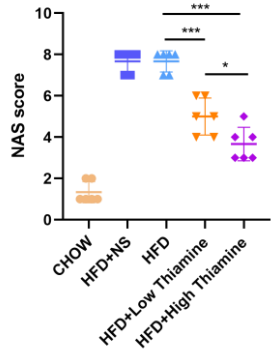
Result

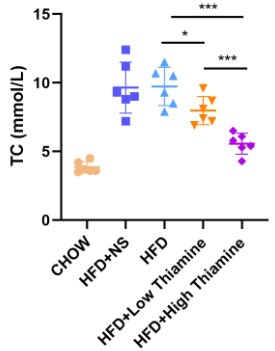
Thiamine alleviates fatty liver in mice

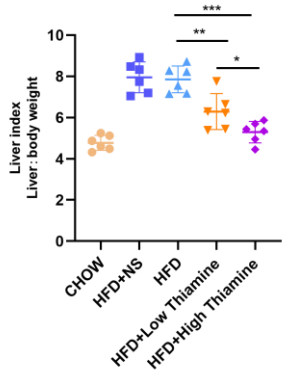


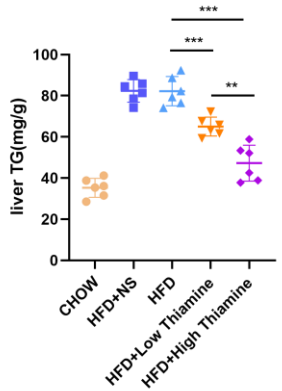


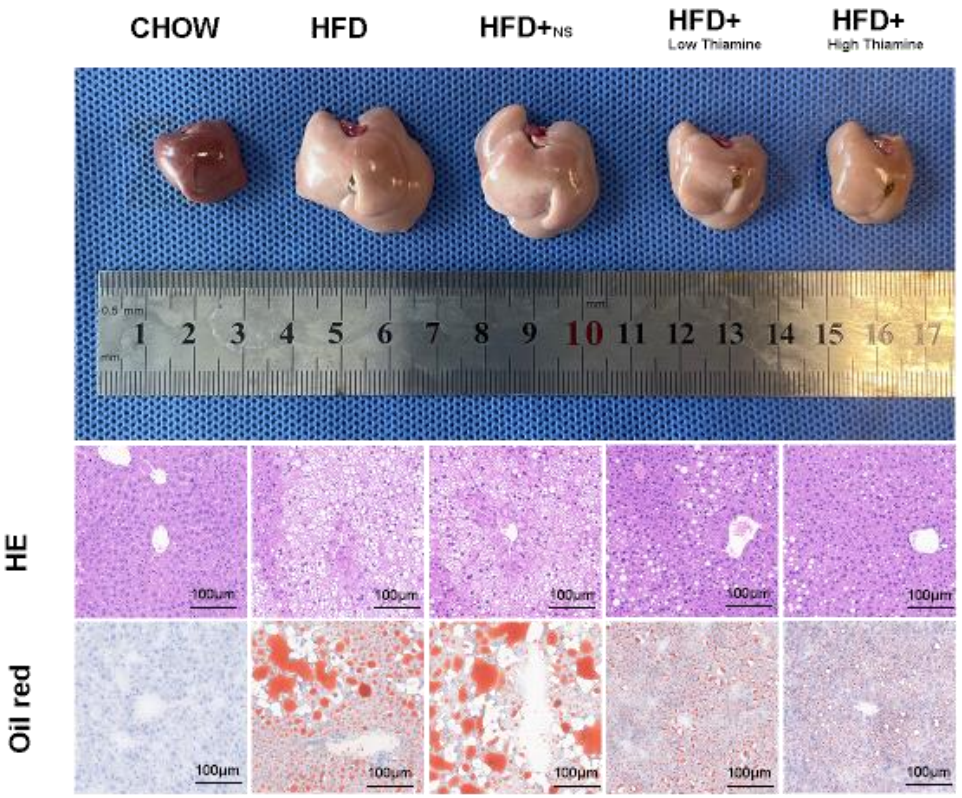






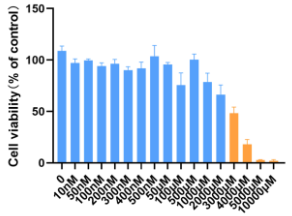


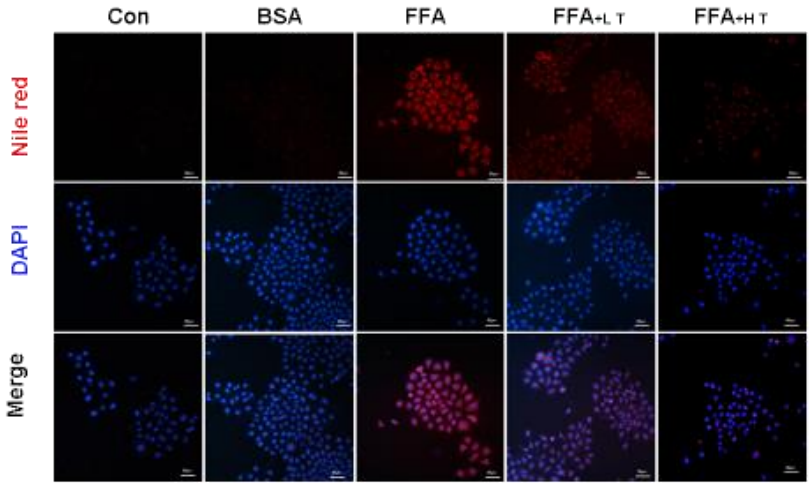


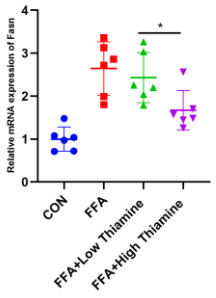


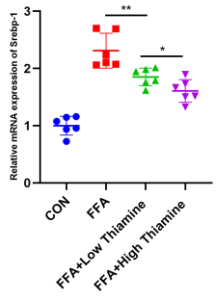
Result

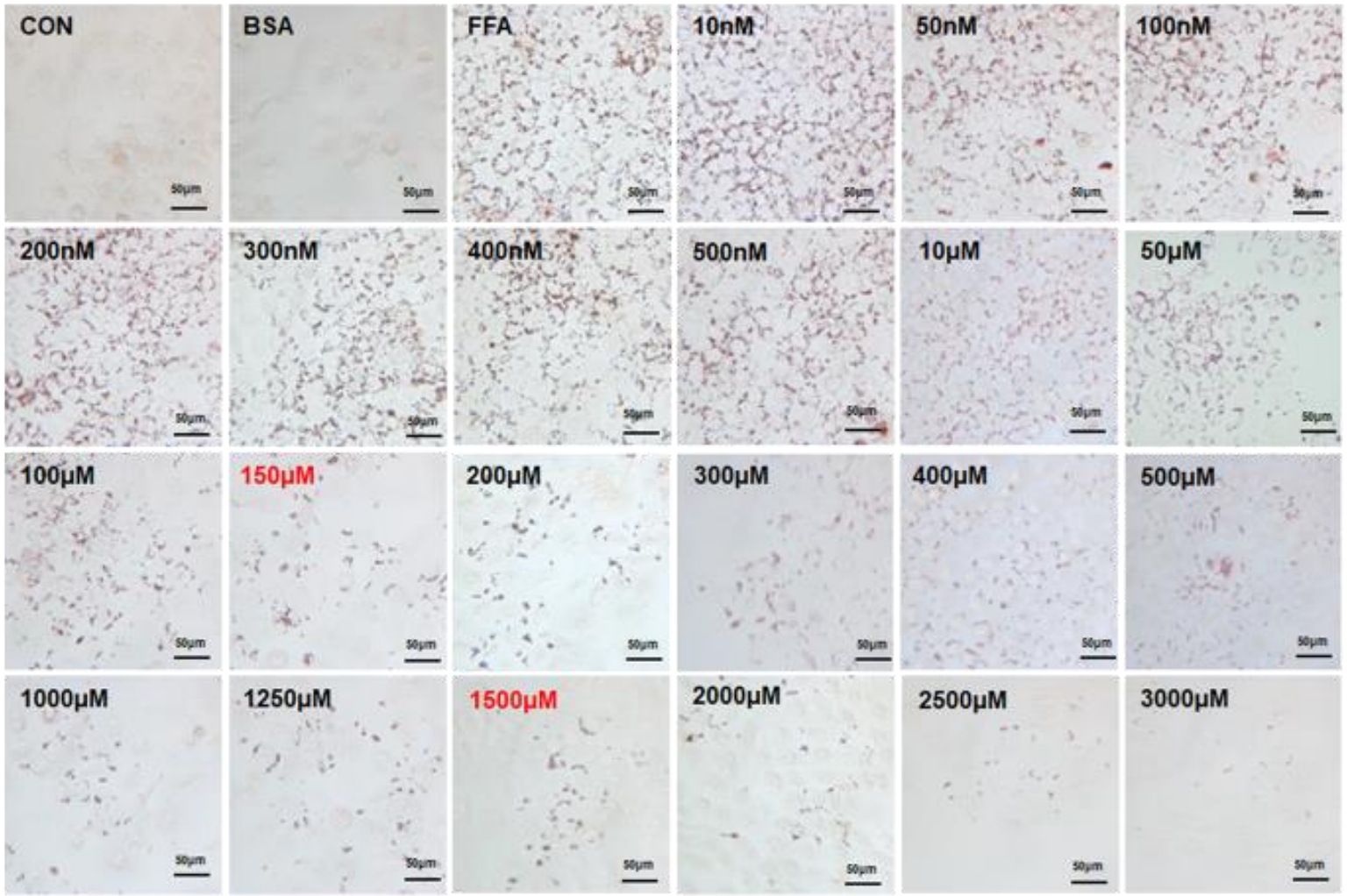
Thiamine alleviates lipid accumulation in hepatocytes in vitro





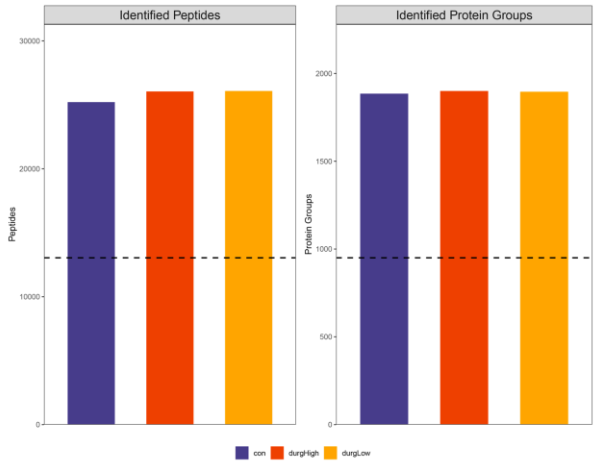


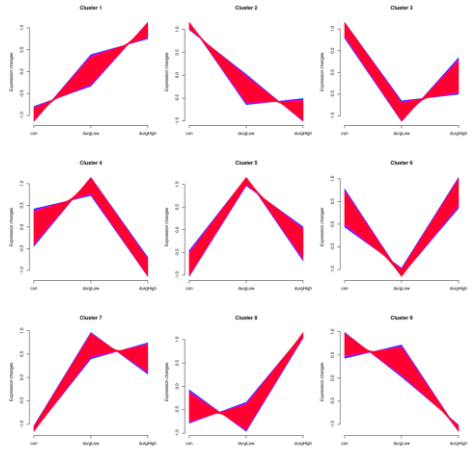


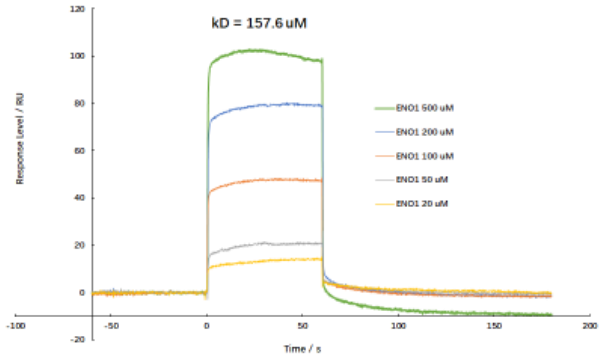


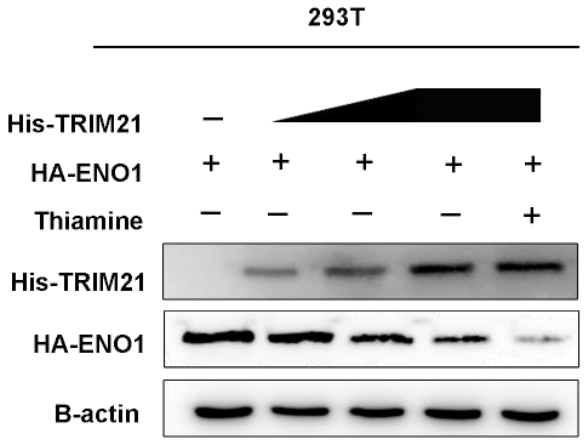
Result

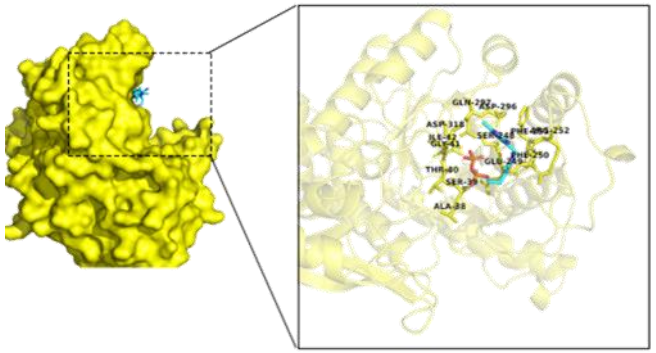
Thiamine alleviates fatty liver in mice by enhancing ubiquitination degradation of ENO1

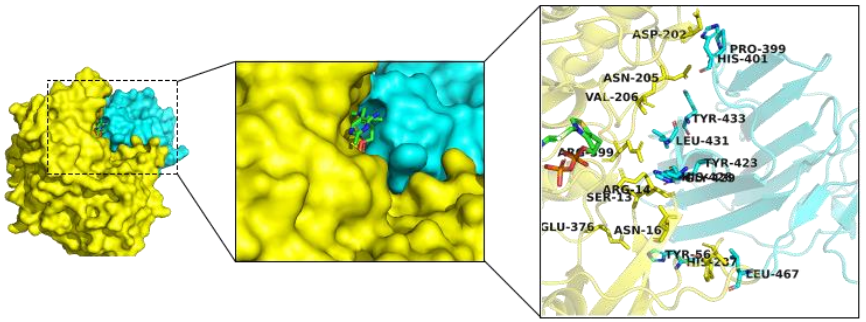








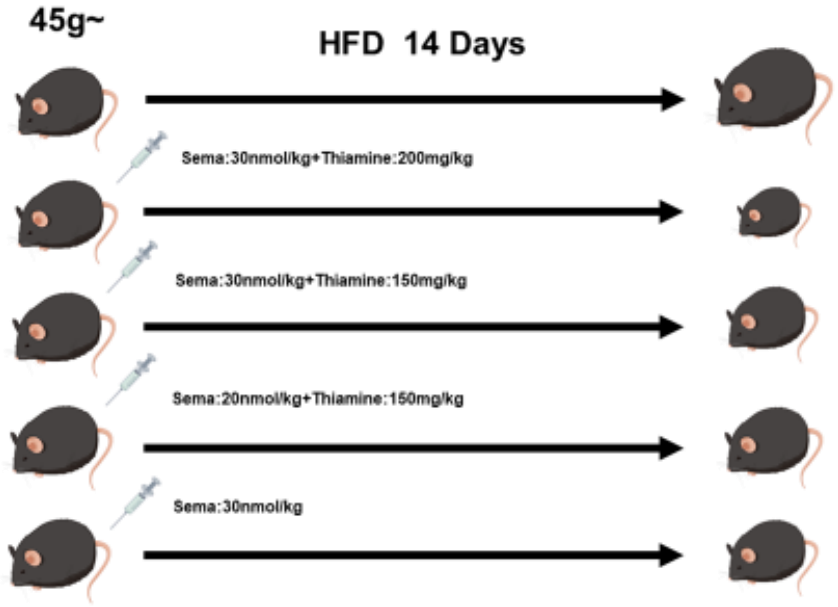


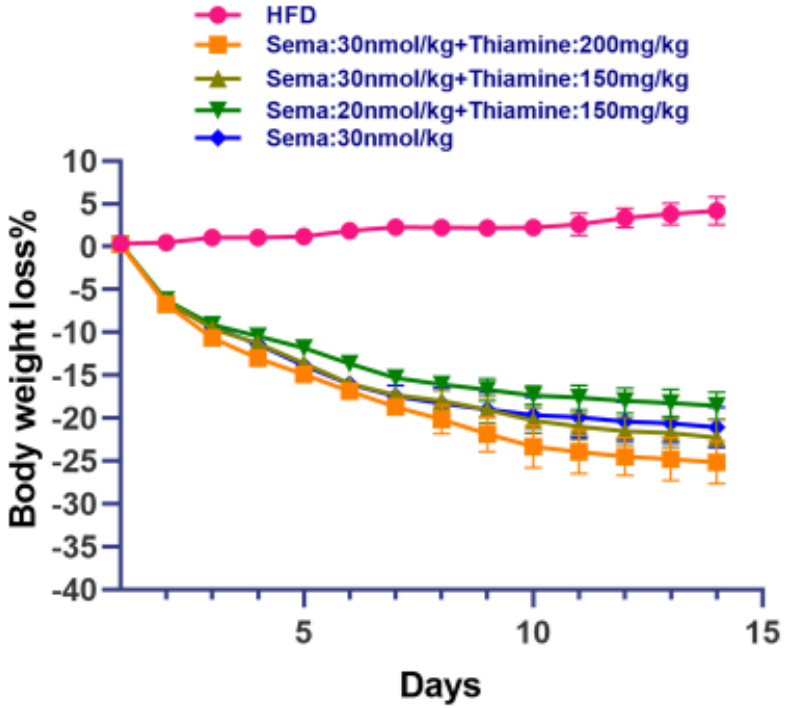


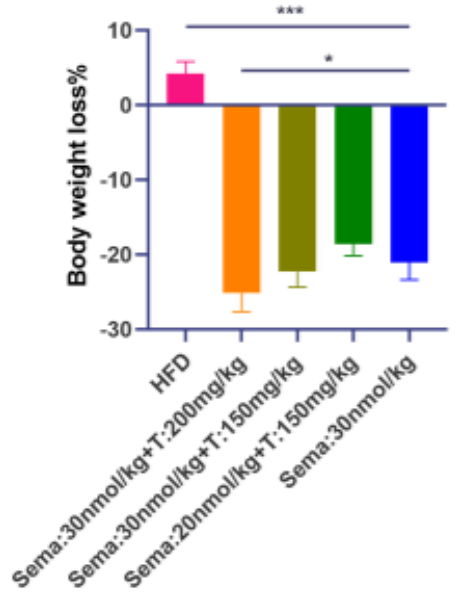
ENO1-Thiamine

Result

thiamine-Semaglutide alleviating MAFLD in mice

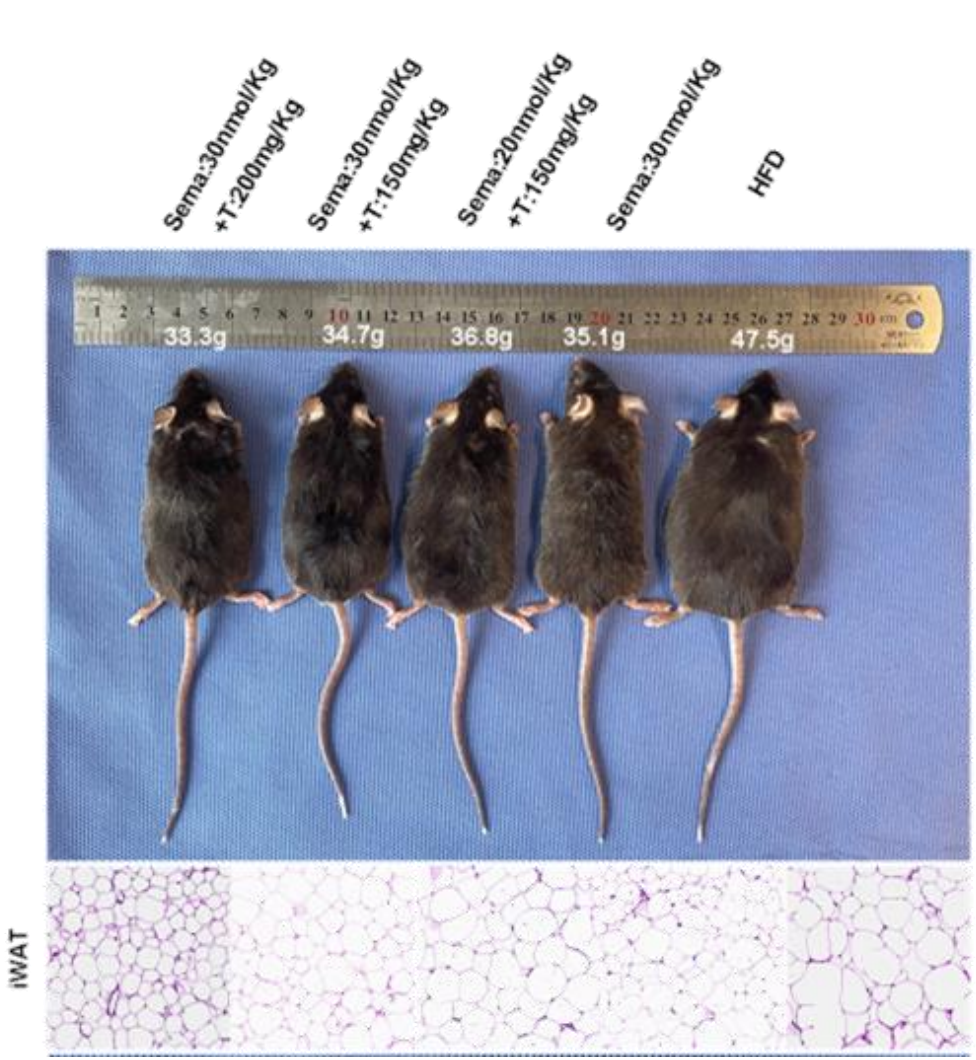


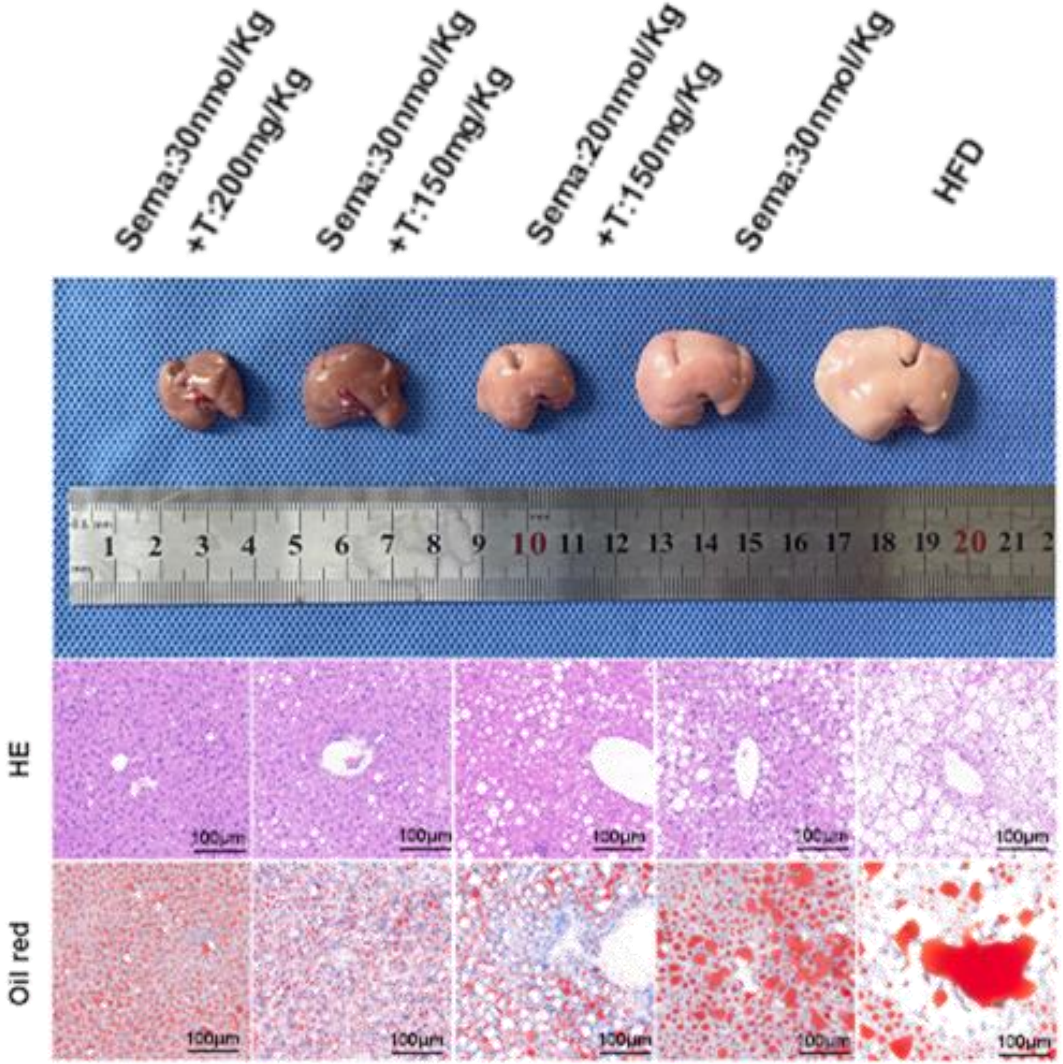




Result

thiamine-Semaglutide alleviating MAFLD in mice





Thanks

Speaker: Wang Zeng Supervisor: Prof.Tang liming