Editorial

MOLECULAR METABOLISM

NAFLD - A rising metabolic disease

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Dear readers,

The prevalence of non-alcoholic fatty liver disease (NAFLD) is increasing world wide, with nearly 1 billion people globally affected. This tremendous rise is related to the worldwide obesity and diabetes epidemics, which together represent a heavy clinical and economic burden on society. NAFLD ranges from simple steatosis to non-alcoholic steatohepatitis (NASH) with or without hepatic fibrosis in the absence of excessive alcohol intake. While liver steatosis is not associated with liver-related pathologies, severe NAFLD and NASH can progress to liver morbidities, such as cirrhosis and hepatocellular carcinomas, leading eventually to organ failure. Despite this worrisome development, no approved pharmacotherapies are currently available to treat this disease.

To raise more awareness for the heterogeneity of NAFLD, a change of the nomenclature from NAFLD to metabolic associated fatty liver disease (MAFLD) has been suggested, to remove the "alcoholic" bias and more accurately reflect disease pathologies and patient stratifications. Although this renaming initiated from an international panel of experts is a sign for progressive development in the field, it still requires further deliberation and consensus, where the future will show which terminology will succeed and be fully used. Nonetheless, NAFLD is a rapidly evolving field with an emerging deeper understanding of disease mechanisms, development of new diagnostics and staging tools and promising clinical trials.

Thus, in this special issue of Molecular Metabolism on NAFLD, we have compiled a variety of review papers from expert laboratories around the world to cover these new concepts and technologies in this exciting area of research. The review articles span from clinical studies on human NAFLD to genetics and epigenetic regulations all the way to the underlying cellular mechanisms associated with disease development and progression and finish with gold standard biomarkers and treatment options. Specifically, we have focused on the different intracellular regulations, which are all together altered in NAFLD and collectively contribute to NASH progression, which is consistent with the emerging multiple hit hypothesis that leads to disease severity.

We are delighted that we were able to assemble such an excellent and broad overview on cutting edge research and technology in NAFLD, and are extremely grateful to the authors for their outstanding contributions. Enjoy this special issue in Molecular Metabolism on NAFLD!

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