1. Record Nr. UNINA9910674398603321

Autore Shiri-Sverdlov Ronit

Titolo NASH and Systemic Complications: From Basic to Clinical Research / /

Ronit Shiri-Sverdlov and Sabine Baumgartner

Pubbl/distr/stampa Basel, Switzerland:,: MDPI - Multidisciplinary Digital Publishing

Institute, , 2022

Descrizione fisica 1 online resource (232 pages)

Disciplina 610.724

Soggetti Clinical trials

Biomedical materials

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Sommario/riassunto N

Nonalcoholic fatty liver disease (NAFLD) is known as the hepatic manifestation of the metabolic syndrome, and while most patients develop simple steatosis, up to one-third can develop nonalcoholic steatohepatitis (NASH). NASH is a chronic inflammatory condition of the liver that can further progress to fibrosis and cirrhosis, which may eventually lead to liver failure and death. While we have increased our mechanistic knowledge regarding the pathogenesis of NASH within the last decade, treatment options are still limited and liver biopsies have remained the gold standard for diagnosis. To achieve major clinical breakthroughs for NASH patients, it is not sufficient to use a single animal model, since each model has specific limitations. Furthermore, we should rely more on alternative models such as organ-on-a-chip, which will enable us to explore unknown aspects of disease pathogenesis much faster and serve as clinically relevant surrogates for murine models. Another important direction for the improvement of patient health is to pay more attention to extrahepatic, organ-specific and systemic effects, which are associated with NASH. The articles in this Special Issue include an up-to-date overview of the rapidly developing technologies, novel targets for intervention and insights in the field in NASH. Additionally, these articles describe the major challenges in the field, strategies to overcome them and suggestions

for future directions. To improve patient's outcome, clinicians, as well as scientists with biomedical, nutrition, physics and mathematics backgrounds, should join forces. Although challenges remain, the future of the field seems promising as these novel technologies and developments are expected to lead to progress in NASH.