



## Multi-Organ Alcohol-Related Damage: Mechanisms and Treatment

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### Message from the Guest Editors

Dear Colleagues,

Alcohol consumption causes damage to various organs and systems. Liver is a primary target for the detrimental effects of alcohol since this substance of abuse is mainly metabolized by liver cells which express high levels of two major alcohol oxidizing enzymes, alcohol dehydrogenase and CYP2E1. Other organs, including brain, gut, pancreas, lungs, immune system are also affected by alcohol. Alcohol may also serve as a second hit for progression of viral infections, autoimmune diseases and cancer. Common mechanisms of alcohol-related organ injury include increases in oxidative stress, methylation impairments, posttranslational modifications of proteins, dysregulation of lipid metabolism and signal transduction pathways that ultimately affect cell survival and function. This Topical Collection will cover the pathobiology of alcohol-sensitive organ injury and the development of targeted treatment strategies.

We encourage you to share your research in this broad field that demonstrates how the harmful effects of alcohol contribute to disease initiation and progression in the liver and other organs of the body.

Prof. Natalia Osna

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*Collection Editors*





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