Oxidative Medicine and Cellular Longevity

Hindawi

Special Issue on

Molecular Cross Talks in Oxidative-Stress-Mediated Chronic Liver Injury

CALL FOR PAPERS

Liver, the most important organ in metabolism, has always been studied in connection with any kind of metabolic dysregulation in the body. Although alcohol-induced liver dysfunction has been studied most extensively now, the fact that teetotalers started showing the same kind of pathophysiological signs of liver injury drew the attention of researchers to "nonalcoholic fatty liver disease" just more than a decade ago. An increasing number of cases of obese subjects with liver injury presented to the clinics. Nonalcoholic fatty liver disease encompasses a spectrum that starts with a benign condition of fat accumulation or steatosis and progresses to steatohepatitis and further to fibrosis. Just like alcoholic liver disease, this eventually can lead to cirrhosis and hepatic carcinoma. At present, at least one in ten Americans have some form of liver disease, and each year approximately 21,000 Americans are diagnosed with liver cancer.

Oxidative stress, whether alcohol-generated or generated from lipotoxicity, has been a key player (in the multiple-hit hypothesis) in the progressive phase of the disease. Finding specific molecular cues for the oxidative-stress-driven nonviral forms of hepatitis remains very important, since, to date, no persistent biomarker has been discovered, nor has a single therapeutic strategy been devised for remediation or alleviation of the disease in its early form. Mitochondrial dysfunction and ER stress and their association with autophagy, pyroptosis, and necroptosis have gained increasing interest in chronic liver disease progression. Oxidative stress and reactive oxygen species generation have already been identified to be common factors in connecting these dots.

We invite researchers to contribute original research articles as well as review articles that will enhance our understanding of the field or stimulate the discovery of novel molecular targets and therapeutic strategies in chronic liver disease. We are particularly interested in new insights into the role of oxidative stress in the mechanistic progression of the disease.

Potential topics include but are not limited to the following:

- Recent developments in the field of nonviral chronic liver disease, focused on the role of oxidative stress in modulating molecular interactions
- Role of mitochondrial dysfunction and endoplasmic reticulum stress in the etiology of the disease
- Novel ideas for the prophylaxis and targeted therapeutics of the oxidative stress-driven liver disease

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/omcl/mctcl/.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor
Suvarthi Das, University of California Davis, Sacramento, USA
das6@email.sc.edu

Guest Editors
Saurabh Chatterjee, University of South Carolina, Columbia, USA
schatt@mailbox.sc.edu

Gregory A. Michelotti, Metabolon Inc., Durham, USA
gmichelotti@metabolon.com

Banishree Saha, University of Massachusetts, Amherst, USA
banishree@umass.edu

Submission Deadline
Friday, 30 June 2017

Publication Date
November 2017