

Special Issue on **Pathological Consequences of Drug Abuse: Implication of Redox Imbalance**

CALL FOR PAPERS

Drug abuse has been shown to increase the risk of developing different pathological conditions, such as mental disorders and infectious and pulmonary diseases as well as cardiovascular failure. With respect to drug abuse-related psychiatric conditions, it has been also demonstrated that subjects already suffering from mental illnesses are particularly vulnerable to drug abuse and addiction and that, conversely, chronic drug abuse often makes these psychiatric conditions more severe and difficult to treat.

Redox imbalance, defined as a disequilibrium between reactive oxygen species (ROS) generating and degrading systems, has recently gained great importance as crucial pathogenetic element in the impact of drug abuse on health. Moreover, increased oxidative stress has been also proposed as a reliable biomarker to be used in clinics for the identification of the “risk state” to develop mental, infectious, respiratory, or cardiovascular disorders following the abuse of psychoactive compounds.

This special issue will include original research articles and reviews on recent preclinical and clinical findings about the role of redox dysregulation in the onset and progression of drug-induced disorders, with a particular focus on the possibility of developing more targeted pharmacological interventions for them.

Potential topics include but are not limited to the following:

- ▶ Role of redox imbalance (in terms of free radical production by mitochondria, NADPH oxidase NOX enzymes-derived oxidative stress, impaired SOD, and glutathione system activity) in the pathogenesis of drug-induced mental diseases
- ▶ Role of redox imbalance in the pathogenesis of infectious illnesses associated with chronic use of psychoactive compounds
- ▶ Role of redox imbalance in the development of drug abuse-related respiratory disorders
- ▶ Role of redox imbalance in the onset and progression of cardiovascular failure following addictive behaviors
- ▶ The use of antioxidant compounds or molecules inhibiting specific ROS producing enzymatic systems in the treatment of medical conditions resulting from drug abuse
- ▶ Redox imbalance as biomarker to identify the “risk state” to develop a specific disorder following the use of psychoactive compounds
- ▶ Role of redox imbalance in the pathological consequences of emerging drugs of abuse

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/omcl/pcdai/>.

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

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