

TENTATIVE OUTLINE

SPECIAL THEMATIC ISSUE FOR CURRENT PHARMACEUTICAL DESIGN

“APOPTOSIS ROLE IN DIFFERENT DISEASES: ADVANCES AND FUTURE ASPECTS”

Guest Editors: *Prof. Rupesh K. Gautam, Prof. Firoz Anwar and Prof. Mohammad Amjad Kamal*

Apoptosis is programmed cell death. It is a mechanism involved in maintaining tissue homeostasis as well as the removal of harmful or needless cells from an organism. Defects in the physiological mechanisms of apoptosis pathways may involve different human diseases like cancer, AIDS, diabetes, Parkinson's disease, and rheumatoid arthritis. Insightful understanding of mechanisms and related pathways of apoptotic play a vital role in disease and its treatment. Findings on the regulation of apoptosis are involved in the development of therapeutic approaches, some of which are in clinical trials or have entered medical practice also. This special issue will be focused on the treatment strategies for various diseases based on advances and future aspects of the apoptosis. This issue will be very beneficial for the researcher who is seeking treatment strategies based on apoptosis. The objective of this Special Issue is to collect original and review articles to provide the most updated molecular and pharmacological knowledge of this discipline.

Keywords: Apoptosis, Programmed cell death, Cancer, AIDS, diabetes, Parkinson's disease, rheumatoid arthritis.

Sub-topics:

- Apoptosis pathways involved in different human diseases like cancer, AIDS, diabetes, Parkinson's disease, rheumatoid arthritis
- The availability of nutrients and the metabolic pathways active within the cell and Apoptosis
- Understand the metabolism-apoptosis connection for development of therapeutics for diseases
- Treatment strategies via linkage of apoptosis with drug metabolism
- Apoptotic signaling linkage to several metabolic pathways, including glycolysis, the tricarboxylic acid cycle (TCA cycle), and the pentose phosphate pathway (PPP)
- Bcl-2 proteins and other regulators of apoptosis and their twin metabolic and apoptotic functions
- Metabolism-apoptosis link and function of cytochrome c
- Sirtuins and their role in apoptosis and metabolism
- Artificial Intelligence, deep machine learning, computational approaches in Apoptosis research

Schedule:

Publication: 30th March 2022

Contacts:

Prof. Rupesh K. Gautam, Department of Pharmacology, MM School of Pharmacy, Maharishi

MarkandeshwarUniversity, Sadopur-Ambala (Haryana) India-134007

Prof. Firoz Anwar, Department of Biochemistry, Faculty of Sciences, King Abdulaziz University, Jeddah, Kingdom of Saudi Arabia

Prof. Mohammad Amjad Kamal, West China Hospital, Sichuan University, China;
King Fahd Medical Research Center, King Abdulaziz University, Saudi Arabia;
Enzymoics, NSW; Novel Global Community Educational Foundation, Australia

Email: drrupeshgautam@gmail.com; firoz_anwar2000@yahoo.com; prof.ma.kamal@gmail.com