# **Special Issue**

# Redox-Modulating Strategies in Cancer Therapy: Targeted Thioredoxin System Inhibition

## Message from the Guest Editor

The mammalian thioredoxin system, including the core components thioredoxins and thioredoxin reductases as well as the related downstream proteins, play a crucial role in maintaining cellular redox homeostasis and regulating diverse signaling pathways. Tumor cells harbor a different redox microenvironment from that of noncancer cells, and this redox microenvironment is pivotal for tumor initiation, proliferation and metastasis. Thus, interfering with redox signaling in cancer cells has been recognized as an emerging strategy for cancer therapy. The Special Issue, "Redox-Modulating Strategies in Cancer Therapy: Targeted Thioredoxin System Inhibition," showcases advancements in thioredoxin system-based cancer therapy. Topics will include but not be limited to the following topics:

- Novel small molecules targeting the thioredoxin system for cancer therapy;
- Novel approaches targeting the thioredoxin system for cancer therapy;
- Novel action mechanisms of redox-interfering molecules:
- Novel redox-dependent signaling pathways in cancer cells:
- Clinical development of thioredoxin system inhibitors;
- Relevant review/commentary articles.

## **Guest Editor**

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## Deadline for manuscript submissions

28 February 2025



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## **About the Journal**

## Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

## Editor-in-Chief

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