



Ferroptosis: Mechanisms and Human Disease

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Message from the Guest Editor

Dear Colleagues,

Ferroptosis is a unique form of cell death, driven by iron-dependent phospholipid peroxidation, which is regulated by a wide range of cellular metabolic processes, including redox homeostasis, iron handling, mitochondrial activity, amino acid, lipid, and sugar metabolism, in addition to several signaling pathways that are relevant to diseases. It is important to note that ferroptosis is closely associated with many diseases on a pathological level. It is also important to note that ferroptosis is closely associated with many diseases on a pathological level. In recent years, research has focused on regulating ferroptosis to prevent and treat diseases associated with it. The presence of ferroptosis is currently found in numerous common diseases such as tumors, inflammatory diseases, bacterial infections, hepatitis, inflammatory bowel diseases, skeletal muscle damage, and neurodegenerative diseases.

Authors are encouraged to discuss the characteristics and mechanisms of ferroptosis in this Special Issue and summarize how ferroptosis plays a role in pathophysiological processes in a wide variety of systemic diseases.

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Guest Editor





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