

# Special Issue

## Iron and Cancer

### Message from the Guest Editors

Iron is an essential element for all organisms. Iron-containing proteins play critical roles in cellular functions. The biological importance of iron is largely attributable to its chemical properties as a transitional metal. However, an excess of “free” reactive iron damages the macromolecular components of cells and cellular DNA through the production of harmful free radicals. These properties are closely associated with carcinogenesis. For instance, hepatocellular carcinoma, malignant mesothelioma, and ovarian clear cell carcinoma have been shown to develop in relation to excess iron and/or oxidative stress caused by free radicals. In the last decade, accumulating evidence regarding molecules regulating iron metabolism or iron-related cell death programmes such as ferroptosis has shed light on the relationship between excess iron and carcinogenesis. Furthermore, iron depletion by chelating is shown to be a promising therapeutic option in several cancers. This Special Issue will highlight the current knowledge on iron- and metal-related biology for understanding pathogenesis-based therapy and prophylaxis.

### Guest Editors

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### Deadline for manuscript submissions

closed (31 August 2022)



## Cancers

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## About the Journal

### Message from the Editor-in-Chief

*Cancers* is an international online journal addressing both clinical and basic science issues related to cancer research. The journal is publishing in Open Access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

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### Editor-in-Chief

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