



Iron Metabolism Rewiring and Ferroptosis to Trigger Drug Resistance in Ovarian Cancer

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Deadline for manuscript
submissions:

31 October 2024

Message from the Guest Editor

Dear Colleagues,

Ovarian cancer (OC) is the second most common and lethal malignancy among female reproductive systems. Currently, the chemotherapeutic approach for OC relies on platinum-containing agents that kill cancer cells by triggering apoptosis. However, OC cells can be apoptosis-defective, thus leading to chemoresistance.

Cancer cells show the so-called “iron-addicted” phenotype, characterized by a marked iron uptake and a weak iron efflux. Ferroptosis induction has shown promising antitumor effects in OC cells, but the existence of undefined genetic and metabolic determinants of susceptibility has so far limited the application of ferroptosis inducers in vivo. This Special Issue will cover the following topics:

Ferroptosis as an alternative strategy to target apoptosis-resistant OC cells;

Characterization of genetic and metabolic determinants of susceptibility in ferroptosis-resistant OC cells;

Identification of new hallmarks of ferroptosis in OC;

Application of novel iron-based compounds as an alternative therapeutic approach to induce ferroptosis in OC.





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Message from the Editor-in-Chief

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