Special Issue

Hypoxic Signaling: Relation to Cancer Progression and Cancer Stem Cell Regulation

Message from the Guest Editor

The connection between hypoxia and pluripotent cells was made a long time ago by Dr. Shinya Yamanaka who discovered the essential factors needed for pluripotency induction in differentiated cells. All types of cancer contain cancer stem cells representing a small fraction of the bulk tumor, usually around 0.1 – 1% of the total cell number. These cancer stem cells have been shown to be dependent on the same pluripotency-inducing factors discovered by Yamanaka and to be affected by hypoxia. To make things more complicated, hypoxic signaling can be induced by more factors than just hypoxia. The main hypoxic signaling factors HIF-1 and HIF-2 are regulated by multiple pathways, even under normoxic conditions. The aim of this Special Issue is to highlight the different mechanisms regulating hypoxic signaling, i.e., HIF-1 and HIF-2, and their relation to cancer stem cell regulation, cancer progression and treatment resistance.

Guest Editor

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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.

Editor-in-Chief

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