Special Issue

Hypoxia and Cancer: Mechanisms of Resistance and Metastasis

Message from the Guest Editor

Hypoxia, or inadequate oxygenation of a solid tumor, leads to tumor progression. Tumor hypoxia also negatively affects therapeutic outcomes in part by inducing genetic changes in neoplastic cells that promote cancer cell survival. Hypoxia-inducible factors (HIFs) and their target gene products are highly active in cancer and have been shown to contribute to chemotherapeutic resistance. Consequently, alleviating hypoxia in solid tumors is considered a promising target for improving the efficacy of anti-cancer therapeutics. The precise contribution of hypoxia in altering the cellular composition, non-cellular composition and cell phenotypes is emerging and will be important to consider when developing novel therapies for cancer patients. This current volume aims to present new ideas and novel findings on how hypoxia influences

- the immune landscape in cancer;
- the cancer stem cell phenotype;
- metastasis;
- resistance to therapy;
- invasion of epithelial cells into the connective tissue;
- the epithelial-to-mesenchymal transition; and
- new tools that can provide quantitative insight into the O2 levels in human tumors, experimental tumors, and organoids.

Guest Editor

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Deadline for manuscript submissions

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Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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