

Special Issue on
Inflammation in the Tumor Microenvironment

CALL FOR PAPERS

Breakdown of immune homeostasis, either diminished or exacerbated innate immune signaling, may trigger inflammation-associated cancer. The interaction between immune cells, their soluble mediators, genetically altered cells and host structural components resulted in the production of an intricate and heterogeneous complex of cells and matrix that forms the tumor microenvironment. Inflammation in the tumor microenvironment affects every aspect of tumor development and progression as well as the response to therapy. Inflammatory cellular effectors and cytokines within the tumor microenvironment can promote an antitumor immune response or support tumor pathogenesis. Similarly the multiprotein complex inflammasome may eliminate malignant cells via the inflammatory type of programmed cell death, termed pyroptosis, or favor the production of growth and trophic factors for tumor cells. Chronic inflammation also induces genetic and epigenetic alterations of various protooncogenes and tumor-suppressor factors through various mechanisms. In addition, inflammation-related angiogenic milieu regulates tumor survival and tolerance. Given the multifaceted role of inflammation in cancer, a better understanding of the tumor-associated inflammatory signaling and their microenvironmental cross-talk and network is crucial for elucidating tumorigenesis mechanisms and for cancer therapy, prevention, and risk assessment.

In the proposed special issue, we will invite authors to present original research articles as well as review articles on elucidating the signaling network and pathological significance of inflammatory tumor microenvironment that controls the induction, progression, and therapies of cancers. We are particularly interested in articles investigating the role of the essential microenvironmental elements including inflammatory mediators and cellular effectors, multimeric protein complexes (inflammasomes), genomic alterations (genetics and epigenetics), and angiogenesis (vascular stromal components) in the context of cancer-related inflammatory processes and the new insights into tumor immunotherapy, which will help explore new target or approach for cancer treatment, by either boosting antitumor immunity or subverting tumor-educated immunosuppression.

Potential topics include but are not limited to the following:

- ▶ Inflammatory signaling bridging homeostasis disruption and tumorigenesis
- ▶ Vascular inflammation in tumor microenvironment
- ▶ Inflammasomes in the tumor microenvironment
- ▶ New basic/translational insights in tumor immunotherapy
- ▶ New clinical insights in tumor immunotherapy
- ▶ Wound microenvironment and tumorigenesis
- ▶ Genetic and epigenetic modulation in inflammatory tumor microenvironment
- ▶ Tumor-infiltrating leukocytes
- ▶ Cytokine signaling in the tumor microenvironment
- ▶ Inflammatory biomarkers in the tumor microenvironment

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jir/itm/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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