

CALL FOR PAPERS

The gastrointestinal (GI) tract maintains a complex environment with diverse epithelial and nonepithelial cell types that regulate discrete and distant processes. Infection and inflammatory conditions such as colitis, Barrett's esophagus, and pancreatitis are linked to GI cancers, and introduction of a single targeted mutation in a specific cell type with or without inflammation can initiate cancer. Recent molecular subtyping studies using next-generation sequencing have expanded our understanding of GI cancers, and efforts to go beyond basic pathological assessment including multigene biomarkers, machine learning algorithms, and organoid drug screens are underway with promising results. Existing therapies including nucleoside analogs, targeted inhibitors, and monoclonal antibodies have demonstrated positive but limited results in patients, while newer therapies such as anti-PD1 immunotherapy have thus far shown benefit in subsets of patients without delivering the transformational results seen in other cancers. Previous work demonstrates that the tumor microenvironment (TME) is a major regulator of therapy resistance, antitumor immunity, and progression. To develop effective new therapies for GI cancers and accurately classify patient risk, an improved knowledge of molecular signaling and cell-cell interactions within the TME is needed. Importantly, in the current clinical context, a more complete understanding of how TME components modulate resistance to therapy and antitumor immunity will be fundamental to improving patient treatment options and outcomes.

This special issue seeks to improve understanding of the molecular, cellular, and pathological characteristics of the TME in GI cancers. This includes but is not limited to the role of specific TME cell types in therapy resistance (cancer stem cells, immune cells, tumor stroma, etc.), TME regulation of antitumor immunity, precancerous inflammation, novel TME-targeted therapies, TME molecular signaling, and clinical studies of the TME. We especially encourage original research articles that address therapy resistance and antitumor immunity in the context of signaling and interactions between discrete TME cell types, the use of TME-derived organoids for therapy resistance profiling and predicting patient outcomes, novel TME research methods, investigations of cancer stem cells and their functional components, bioinformatic studies of the TME, and novel biomarker concepts. We also enthusiastically welcome review articles that address the state of TME research, specific components of the TME, the clinical significance of the TME in therapy resistance, and TME-focused therapies.

Potential topics include but are not limited to the following:

- ▶ Investigations of the TME's role in therapy resistance
- ▶ Characterization of TME-based regulation of antitumor immunity
- ▶ In vivo or in vitro studies of TME-targeted therapies to overcome resistance
- ▶ Characterization of TME alterations leading to GI carcinogenesis
- ▶ Interactions between TME cell types in relation to GI cancer diagnosis and treatment
- ▶ TME molecular signaling with relevance to GI tumor initiation or progression
- ▶ Discovery of surrogate TME biomarkers and associated patient outcomes
- ▶ Translational or clinical investigations of the TME in GI cancer
- ▶ Epithelial-mesenchymal remodeling of the TME
- ▶ Liquid biopsy approaches to detect components of the TME

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

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

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