Message from the Guest Editors

Colorectal cancer (CRC) is the third most commonly diagnosed cancer in males and the second in females. Translational research has led to significant benefits in CRC screening and patient management, and precision medicine is fast becoming the aim of scientific research.

The current TNM staging system for CRC is inadequate in terms of guiding clinical practice. Several molecular subtypes based on clinical pathological and/or molecular phenotypes have been proposed, but further validation is required in large prospective clinical trials.

Individualized treatment for metastatic CRC is also emphasized increasingly. The introduction of molecular-targeted agents with anti-EGFR or anti-angiogenic mechanisms of action has significantly improved patient outcome, but predictive markers of efficacy, especially for angiogenesis inhibition, are still lacking.

A new approach to biomarker detection is the use of liquid biopsy. Liquid biopsy has the potential to replace tumor tissue analysis in clinical practice and could be used to monitor the extent of tumor burden and to detect tumor heterogeneity and molecular resistance to therapy.