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The Role of Chromosomal Instability in Cancer

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Message from the Guest Editor

Dear Colleagues,

The current Cancer Genome Project has unexpectedly thrown chromosomal instability (CIN) into the spotlight. While it is hard to identify the common recurrent gene mutation pattern for the majority of cancer types, the phenomenon of elevated CIN is overwhelming across all. Furthermore, landscapes of chromosomal or genome-level changes have better clinical prediction power than gene mutation profiles. Such facts challenge the somatic gene mutation theory of cancer and call for a search for new conceptual frameworks and technological platforms.

In recent years, our understanding of cancer evolution mechanisms has undergone significant progress. The role of CIN in cancer is highly significant and deserves further timely research. Thus, this issue may include the following topics:

A case study that links CIN to any hallmark of cancer.

The mechanistic study of CIN.

The study of the relationship between different types of chromosomal variations.

Studies measuring CIN.

Studies using CIN as a biomarker for prognosis and diagnosis.

Studies on the relationship between CIN and major phase transitions such as transformation, metastasis, and drug resistance.







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Message from the Editor-in-Chief

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