

## Special Issue

# Biological Relevance and Therapeutic Potential of G-Quadruplexes in Cancer

### Message from the Guest Editors

DNA and RNA can adopt four-stranded G-quadruplex (G4) structures through self-association of four guanine bases by Hoogsteen hydrogen bonding within a planar G-tetrad. Self-stacking of two or more G-tetrads generates a G4 structure that is further stabilized by cations (mainly potassium or sodium) and small molecules, which have been evaluated as a novel anti-cancer strategy. This Special Issue will highlight the DNA and RNA G4s' biological roles and mechanisms of action to better understand the molecular basis of related diseases as well as to envision the development of novel therapeutic strategies. This will cover both basic and (pre)clinical aspects that will advance our understanding of the possibility to target these structures in human tumors and unravel the relation between G4 formation and lethality of cancer cells to consider G4s as therapeutic targets in cancer.

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### Guest Editors

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### Deadline for manuscript submissions

closed (15 December 2022)



## Cancers

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## About the Journal

### Message from the Editor-in-Chief

*Cancers* (ISSN 2072-6694) is an international, online journal addressing both clinical and basic science issues related to cancer research. The journal will continue its open access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

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### Editor-in-Chief

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