

# Special Issue

## Biomaterial-Assisted 3D In Vitro Tumor Models: From Organoid towards Cancer Tissue Engineering Approaches

### Message from the Guest Editors

The structural and biological complexity of tumors represents a great challenge for the development of effective therapies and drugs. Traditional *in vitro* cultures are inherently bi-dimensional (2D), whereas *in vivo* animal models are inherently non-human, therefore are affected by drawbacks that slow down and limit the advancements in cancer research. By using biomaterials to generate 3D structures, such as hydrogels and porous scaffolds, 3D *in vitro* models can overcome the oversimplification of traditional cell cultures by offering a physiological-like microenvironment for cancer cell growth and interaction with diverse cell types. This special issue covers current research (by original research papers, review articles, and short communications) that focus on the development and study of innovative biomaterial-assisted strategies to recapitulate *in vitro*, within a 3D microenvironment, the formation of cancer, the spread of metastasis and all the related aspects aimed to provide advancement in the study of tumor pathology for oncologic research to be also implemented for drug screening.

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### Guest Editors

Dr. Serena Danti

Dr. Nicola Contessi Negrini

Prof. Alessandro Franchi

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### Deadline for manuscript submissions

closed (1 March 2022)



# Cancers

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**Impact Factor 4.4**

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## About the Journal

### Message from the Editor-in-Chief

*Cancers* is an international online journal addressing both clinical and basic science issues related to cancer research. The journal is publishing in 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

Prof. Dr. Samuel C. Mok

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