



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

Guest Editors:

Dr. Serena Danti

Dr. Nicola Contessi Negrini

Prof. Alessandro Franchi

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Message from the Guest Editors

Dear Colleagues,

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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Editor-in-Chief

Prof. Dr. Samuel C. Mok

Department of Gynecologic
Oncology and Reproductive
Medicine, The University of Texas
MD Anderson Cancer Center,
Houston, TX 77030, USA

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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Contact Us

Cancers Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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