



Molecular Genetics of Breast and Ovary Cancer

Guest Editors:

Prof. Giuseppe Giannini

Department of Molecular
Medicine, University La Sapienza,
00161 Rome, Italy Pasteur
Institute-Cenci Bolognetti
Foundation, 00161 Rome, Italy

Prof. Dr. Laura Ottini

Department of Molecular
Medicine, University La Sapienza,
00161 Rome, Italy

Dr. Anna Coppa

Department of Experimental
Medicine, University La Sapienza,
00161 Rome, Italy

Deadline for manuscript
submissions:

closed (31 October 2020)

Message from the Guest Editors

Dear Colleague,

The discovery of the first two breast cancer genes, *BRCA1* and *BRCA2*, dates back to more than two decades. Since then, a number of high-to-moderate penetrance susceptibility genes were shown to impact on the lifetime risk for breast/ovarian cancer, many of them being involved in homologous recombination (HR). Also, genetic variations in low-penetrance susceptibility loci seem to affect breast/ovarian cancer predisposition or to contribute as genetic risk modifiers, through a polygenic inheritance model. However, clear guidelines to use this knowledge for risk-reducing purposes in mutation carriers is still lagging behind.

BRCA1/BRCA2 mutation status has recently become a predictive biomarker for the treatment of breast and ovarian cancer patients with PARP inhibitors. Additional genetic defects in HR and other DNA repair pathways may account for constitutional or acquired resistance/sensitivity to PARP inhibitors and other targeted therapy.

For this Special Issue of *Cancers*, we will welcome manuscripts describing novel data, methods, collaborative initiatives, editorials, and reviews related to these topics.





an Open Access Journal by MDPI

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Oncology) / CiteScore - Q1 (Oncology)

Contact Us

Cancers Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/cancers
cancers@mdpi.com
[X@Cancers_MDPI](https://twitter.com/Cancers_MDPI)