

## Special Issue

# Advances in the Molecular Basis of BRCA-Associated Cancers

### Message from the Guest Editor

*BRCA1* and *BRCA2* (*BRCA*) are tumor suppressor genes, encoding proteins involved in homologous recombination DNA repair pathways. Inherited mutations in *BRCA* genes are well known for their predisposition to the hereditary breast and ovarian cancer syndrome in women, but they have also been observed in association with additional types of cancers, including male breast, prostate, pancreatic, and melanoma. To date, key clinical improvements have been derived from the identification of peculiar tumor molecular subtypes associated with *BRCA* mutational status, e.g., triple-negative breast cancers, which are characterized by their aggressive behavior. This Special Issue will focus on the molecular biology of *BRCA* genes, the functional evaluation of *BRCA* variants, genotype–phenotype correlations, the molecular profiling of *BRCA*-associated tumors, *BRCA* interactors in DNA repair, synthetic lethality, and other possible therapeutic mechanisms. Original research articles, reviews, and short communications related to these topics are welcomed.

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### Guest Editor

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### Deadline for manuscript submissions

closed (22 December 2021)



## International Journal of Molecular Sciences

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