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Understanding the Evolutionary Dynamics and Ecology of Cancer in Treatment Resistance

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submissions:

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Message from the Guest Editor

Dear Colleagues,

As the importance of somatic evolution in driving cancer initiation and progression is being increasingly recognized, we are now in a place where we can begin to understand its potential role in treatment. Virtually all advanced tumors become resistant to clinically available treatments. Evolution and ecology are key elements in explaining this resistance: in a sufficiently heterogeneous tumor, certain tumor cells will always avoid the full impact of the treatment. This could be the result of insufficient delivery due to the microenvironment, the cells having a (relative) degree of resistance to said treatment through genetic and epigenetic mechanisms, or as a result of the interactions between tumor cells with cells in the stroma. A better understanding of these factors could help us delay or even prevent the emergence of resistance and, potentially, to steer the evolution of the tumor towards clinically desirable outcomes in a patient-specific manner.

For this Special Issue of *Cancers*, we invite research articles and focused reviews on all aspects of cancer evolution and ecology related to treatment.

Prof. Dr. David Basanta

Guest Editor



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Special Issue



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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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