New Insights against Cancer Progression and Metastasis

 Deadline: 10 December 2022

Dear Colleagues,

Cancer metastasis is the main cause of treatment failure and mortality in cancer patients. Cancer is a complex and heterogeneous disease process involving multiple currently undiscovered mechanisms. Understanding the molecular mechanisms, particularly those involving cancer evolution, heterogeneity and metastasis, is essential to develop safe and effective treatments, as well as implementing adequate prevention measures. There are many aspects involved in cancer progression and metastasis such as epithelial mesenchimal transition (EMT), hypoxia, tyrosine kinase activation, angiogenesis, anoikis, drug resistance, cell adhesion and invasion, apoptosis, autophagy, and cancer stem cells. Primary tumors, especially in the early stages, can be eradicated with surgery or radiotherapy, while metastases remain the leading cause of cancer death.

The differences in cellular function between primary and metastatic tumors are key determinants for the identification of the mechanisms for metastases. A targeted approach for the treatment of cancer and metastasis is mandatory to develop a rational prevention strategy. In this Special Issue we are seeking original research articles or literature reviews to highlight the recent efforts in understanding the molecular events that give rise to cancer progression and metastasis; and the novel therapeutic strategies to fight it. We also seek contributions that highlight the combination of natural compounds, drug repurposing or dietary approaches as strategies to inhibit cancer progression and metastases. Articles describing natural compounds or synergism between two or more drugs that have beneficial effects which could be used for the treatment of cancer and metastases are also welcomed.

Dr. Antonio Barbieri and Dr. Francesca Bruzzese

Guest Editors