

## Tentative Outline (Preliminary Proposal of Thematic Issue)

Special/Thematic Issue for the journal "Anti-Cancer Agents in Medicinal Chemistry"

### Title of the Thematic Issue: Role of natural compounds as anti-cancer agents

*Guest Editor: Dr. Giovanni Tossetta*

#### • **Scope of the Thematic Issue:**

Cancer is considered the leading cause of worldwide mortality, accounting for nearly 10 million deaths in 2022. Cancer outcome can be improved through an appropriate screening and early detection and through an efficient clinical treatment. Chemotherapy remains an important approach in treatment of several types of cancers, even though intrinsic or acquired resistance and metastasis are still major obstacles to a successful cure. However, outstanding progress in genetics and molecular biology has prompted the discovery of novel molecular targets and new anticancer agents. Moreover, many studies suggested that cotreatment with natural compounds can increase the efficiency of chemotherapeutics or reduce/eliminate the side effects of these drugs. Importantly, it has been suggested that several natural compounds may prevent cancer onset. Despite the vast number of compounds that have reached the stage of preclinical and clinical studies, the research and development of new anticancer agents and therapeutic strategies must be an everlasting process and constitutes the main subject of this Special Issue.

**Keywords:** Chemoresistance; Radioresistance; Cancer; Natural; Compounds; Anti-cancer; Cancer progression.

#### **Sub-topics:**

- Role of natural compounds in restoring chemotherapy sensitivity
- Role of natural compounds in restoring radiotherapy sensitivity
- Effect of natural compounds on cancer cell proliferation and invasion
- Molecular targets of natural compounds in cancer cells
- Molecular pathways modulated by natural compounds in cancer cells

#### **Schedule:**

- ✧ Complete Thematic issue submission deadline: 20-Aug-2023

#### **Contacts:**

Guest Editor Name: Dr. Giovanni Tossetta

Affiliation: Department of Experimental and Clinical Medicine, Polytechnic University of Marche, Italy

Email: [g.tossetta@univpm.it](mailto:g.tossetta@univpm.it) / [g.tossetta@pm.univpm.it](mailto:g.tossetta@pm.univpm.it)