

Special Issue

Advances in Bioactive Nanoparticles and Cancer: From Biomarker Discovery to Drug Delivery

Message from the Guest Editor

Bioactive nanoparticles, whose properties are strictly connected to their nanoscale size, physical structure and surface properties, exploit their function by interacting with cellular systems and can be either natural, like extracellular particles, or artificial, like liposomes and polymeric or supramolecular-based materials. Nanoparticles can be furthermore engineered to improve their stability and functionalities, such as cellular targeting or drug loading. They can be used in a wide range of applications, ranging from biosensing to cancer immunotherapy. Among them, extracellular vesicles (EVs) are natural nanoparticles released by cells in any kind of biofluids. In the last decades, EVs have been widely studied for biomarker discovery and many advances have been made in the field of cancer diagnosis.

The present Special Issue would include – but it is not limited to – topics in the field of EV-associated biomarker discovery, as well as innovative technologies based on the use of nanoparticles for biomarker discovery in cancer diagnosis and synthesis and functionalization of nanoparticles for drug delivery in cancer therapy.

Guest Editor

Dr. Paola Gagni

Istituto di Scienze e Tecnologie Chimiche (SCITEC) "Giulio Natta",
Consiglio Nazionale delle Ricerche (CNR), 20133 Milan, Italy

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle
Marche, Via Ranieri 65, 60100 Ancona, Italy

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