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Sommario/riassunto	<p>Gene cloning and sequence has provided the opportunity to identify and characterize the functional role of biomarkers expressed in and on tumor cells and the surrounding microenvironment. Molecular and immunologic heterogeneity of cells in the tumor microenvironment contributes to instability, enhanced angiogenesis, and drug resistance of the tumor cell. Since tumor cells are the ultimate therapeutic targets for drugs and therapy development, the tumor microenvironment that regulates the growth and the delivery of effective drug concentrations to tumor cells is the gatekeeper. Thus, to have a significant impact on the overall survival and cure of patients with advanced cancer, the stabilization of the tumor microenvironment should be the initial treatment, followed by treatment that targets and kills tumor cells. Antiangiogenic therapies hold considerable promise in the treatment of a subset of cancer patients and are reported to have a significant impact on the stabilization of the tumor microenvironment. More recently, selenium-containing molecules, such as selenomethylselenocysteine, seleno-L-methionine, and selenized yeast, among others, have been shown to target and modulate biomarkers associated with tumor cells and the tumor microenvironment. The effects are selenium type-, dose-, and schedule-dependent. The pleiotropic actions of selenium are necessary for tumor cell sensitization, and</p>

synergy with mechanism-based combinations. This Special Issue is devoted to highlighting evidence for the potential role of specific types, doses, and schedules of selenium alone and in combination with mechanism-based biologic and cytotoxic therapies for the prevention and treatment of cancer and related diseases. The collection of contributions should provide a comprehensive overview of the pharmacology, metabolism, and delineation of the pleiotropic action of different types of selenium molecules, relevant to the use of selenium as a potential modulator of the therapeutic efficacy and toxicity of biologic and cytotoxic therapies for cancer and related diseases. The pleiotropic action of specific types of selenium, doses, and schedule, as a selective and efficacious modulator of genetic, immunologic, and epigenetic biomarkers, should stimulate expanded preclinical research that could ultimately impact the development of new and novel approaches for the treatment of cancer.
