BioMed Research International

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Special Issue on

# Combinatorial Therapeutic Regimen for Effective Treatment of Cancer

CALL FOR PAPERS

Physiologically complex and dynamic environment of cancer raises several critical challenges for its safe and effective treatment. The discovery of newer therapeutic agents and their cellular targets leads to newer treatment strategies for various forms of cancer. However, monotherapy using single anticancer bioactive compound hardly overcomes the complex tumor biology and often leads to drug resistance. "Combo" or combination drug therapy consisting of multiple chemotherapeutic agents and/or gene therapy are always beneficial, as they can lead to "additive" or "synergistic" effect to kill cancer cells with lower effective dose and minimal side effects. A delivery platform is always required for multiple therapeutic agents to synchronize their pharmacokinetic profiles, pharmacodynamics activities, selective binding to target site, and prolonged circulation in plasma. Carrier based systems such as polymeric nanoparticles, liposomes, nanocapsules, metal nanoparticles, dendrimers, micelles, and carbon nanotubes have the propensity to coload anticancer bioactive compounds, effectively targeting the site of action and releasing the entrapped bioactive compounds in synchronized manner.

We invite investigators to contribute with the submission of original research articles as well as review articles in order to explore the anticancer activity of novel therapeutic combinations and carrier based approaches for increasing the therapeutic efficacy of combinatorial anticancer bioactive compounds.

Potential topics include but are not limited to the following:

- *In vitro* studies for new drug/gene combination and efficacy in cancer cell line
- Combination of gene therapy and chemotherapy
- Combination of siRNA and chemotherapeutics
- Combination of siRNA and miRNA
- Combination of chemotherapeutics and natural plants derived additives
- Combination of photothermal and chemotherapy
- Combination of photodynamic and chemotherapy
- Design of delivery systems for abovementioned combination therapy
- Polymer conjugates for delivery of combination therapeutics
- Surface functionalized nanocarriers for targeted delivery of combination therapeutics

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/bmri/pharmaceutics/ctret/.

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