#### **Tentative Outline**

# Special Thematic Issue for the journal "Current Pharmaceutical Design" (CPD)

Title of Thematic Issue: Combination therapeutics - how to innovatively use "old" pharmaceuticals to combat "novel" pernicious microbes

**Guest Editor: Dr. Zeng Ping** 

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

In the current post-antibiotic era, the worldwide prevalence of drug resistance necessitates the development of novel antimicrobial agents. Multidrug resistance has emerged in tumor, bacterial, and fungi cells, greatly reducing the application scope of approved therapeutics. Unfortunately, the pace of discovery of new medications has been severely sluggish, and developing novel drugs is costly. To combat these pernicious microbes, the combination of currently applicable drugs may be a promising alternative strategy since it can rejuvenate these "old" molecules to combat "novel" pathogens. Combination therapeutics may open up prospects for a resolution of this problem in a more economical route.

This research topic aims to contribute to promoting information communication about promising combination therapeutics in the future. These proposed alternative groups may exhibit advanced characteristics in controlling pernicious microbes. With this topic, we would like to provide a forum for researchers to report their newly-discovered combination therapeutics which may be beneficial to human wellness. Studies regarding novel adjuvants for approved medications are highly encouraged. Rational designs between different therapies (such as bacteriophage-antibiotics combination) are also encouraged. This research topic welcomes both research and review articles addressing abovementioned topics.

# **Keywords:**

Drug combination, antimicrobial agent, multidrug resistance, drug adjuvant, synergistic effect, inhibitor, novel therapeutics.

# **Sub-topics:**

- ➤ Identification of natural products / synthetic compounds which shows synergistic effects with approved drugs against microbes;
- Novel compounds which act as adjuvants to reverse the drug resistance of clinical isolates;
- > Specific combination therapeutics which demonstrate outstanding advantages including low cost, user-friendly control, improved antimicrobial efficiency et al.;
- ➤ Discovery of emerging drug-resistant strains and proposed promising combination therapeutics.

## **Schedule:**

 $\diamond$  Thematic issue submission deadline: **Dec. 31**<sup>st</sup>, **2023.** 

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