Tentative Outline

Drug Repositioning and Innovative Delivery
Guest Editors: Pan Zheng, Tao Song, Yilei Zhang

This special issue aims to shed some light on the future of pharmacy development in two aspects, drug repositioning and innovative delivery methods.

Drug repositioning (DR), also known as drug reprofiling, drug repurposing or drug reusing, has been a trending field of research since 2004, which attracts the attention of researchers from medicine, pharmacy, biochemistry and other related fields. Drug reposition is a process of discovering novel uses and therapeutic applications of existing drugs. Take methotrexate(MTX) for example. MTX was initially discovered as chemotherapy to treat cancer, and later it is found that low doses of methotrexate has an anti-inflammatory effect and is used widely for rheumatoid arthritis(RA) and skin symptoms such as eczema and psoriasis. Various methods have been developed in conventional fields, whereas with the advancement of big data and machine learning, DR becomes even more cost-effective and accurate. This special issue looks for the recent development of DR in silico, in vitro and/or in vivo

Each year there are millions of new drugs/medicine developed, new mechanisms of drug delivery are also created and evolved. Typical delivery methods are oral administration, topical treatment, injection and infusion. This special issue also collects interesting problems worth investigation for these methods, e.g., delivery vehicle designs and controlled release methods. Innovative methods of drug delivery techniques, e.g., low-frequency sonophoresis, are also of the scope of this special issue.

Keywords: drug repositioning, drug delivery, drug carrier, drug vehicle, innovative delivery, drug efficacy, controlled release

Subtopics:

The subtopics to be covered within this issue are listed below:

The sub-topics to be covered in the scope of this issue,

- ➢ Drug repositioning,
  - o in silico, in vitro and/or in vivo tests and experiments
  - o novel methods
  - o efficacy analysis
  - o case report
  - o computer-aided drug synthesis and design
- ➢ Drug delivery,
  - o method development and formulation
  - o system evaluation and characterization
  - o new methods of encapsulation and controlled release.

Schedule:

- ✧ Manuscript submission deadline: 30th Nov, 2020
- ✧ Peer Review Due: 31st Jan, 2021
- ✧ Revision Due: 28th Feb, 2021
- ✧ Announcement of acceptance by the Guest Editors: 31st Mar, 2021
- ✧ Final manuscripts due: 30th Apr 2021

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