

**Aims & Scope:**

Drug repurposing is an approach towards finding new therapeutic intervention for the currently approved drugs. It highlights the importance of bringing medicine in to the market for newer diseases (disease on which the approved drugs have not been tested and diseases for which current therapy is not good enough) in a short time frame by using already tested and approved drugs. Drugs that have already been tested on humans for various pharmacological and toxic effects, will be repositioned towards a new disease in such a way that it cuts the costs of original drug formulation and development by several billion dollars, cuts the time it takes for research and development by at least 10-12 years and makes these drugs available to prevent or cure newer diseases. There is a growing threat of infectious diseases that need, immediate medical attention and alternatives to targeted therapies. The never ending battle against cancer, the escalation of microbial resistance towards drugs, the dawn of rare and orphan diseases, make drug repurposing a strategic approach towards this existing conundrum. These diseases in current scenario that need immediate attention to therapeutic intervention are those that cannot wait for another decade for the development of a new molecule. The assessment of safety, risk of failure and efficacy make drug repositioning a good strategy especially for those diseases that have no cure and for drugs against which developed resistance impairs their intervention. Sildenafil, Mifepristone, Pregabalin, Buprenorphine are classic cases of drugs used for repurposing. Since strong research and development efforts act as a back bone for each approved drug, the newly repurposed drug if found potent, can actively be put in pipeline for clinical trials and integration in to health care. In the light of developing new therapeutic strategies, drug repurposing as an important strategy to bring academia, clinics, pharmaceutical and biotech companies to stitch a collaborative atmosphere. This partnership allows critical learning as well as more rapid disease therapies. Along with approved drugs, there are also drugs that have been abandoned due to variety of reasons and nutraceuticals which can play a promising role in tinkering with what we have as opposed to waiting for next generation small molecules to come to the rescue.

**Keywords:** Medicinal chemistry, and Drug repurposing, FDA approved drugs, Rare diseases, Drug resistance

**Subtopics:**

- Analytical, Systemic and informatics approaches towards drug repurposing
- Repositioning specific drug target for multiple diseases and multiple drug targets for a specific disease
- Repositioning towards microbial resistance
- Cancer drug repurposing
- Cellular mechanisms in repurposing
- Nutraceuticals and Abandoned drugs repurposing
- Repurposing straight from clinics and case reports
- Ethics in drug repurposing, role of academia and pharmaceutical industries in intellectual property

**Schedule:**

- ✧ Manuscript submission deadline: December 25th, 2017
- ✧ Peer Review Due: 15th January, 2018
- ✧ Revision Due: 31st January, 2018
- ✧ Announcement of acceptance by the Guest Editors: 7th February, 2019
- ✧ Final manuscripts due: 15th April, 2019

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