

## **Tentative Outline**

### **Special Issue for Current Medicinal Chemistry**

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#### **Therapeutic siRNA/miRNA delivery: obstacles and solutions**

##### **Aims & Scope:**

Many human diseases including cancer remains poor curable, particularly in the advanced stages of the disease. Thus, there is an urgent need of novel therapeutic options. The standard approach to address this goal is the development of novel therapeutic molecules. The process starts with preclinical studies and then proceeds to clinical investigation to extensively define and characterize the pharmacological properties of the novel molecules. The average time span from initial experiments to completed regulatory review varies between 11.4–13.5 years. Moreover, only a limited number of novel molecules progress from the pre-clinical to the next phase of clinical trials. The difficulties in the developing novel therapeutic molecules explains why the price for the molecules that receive marketing approval, is extremely high, thus increasing significantly the burden on health economies worldwide.

An alternative to the development of completely novel drugs, is the so called “drug repurposing”. This approach refers to the application of a drug for another indication than it was originally approved for. A major advantage of drug repurposing is represented by the fact that data about pharmacokinetic properties and toxicity are already available, thus reducing the research costs and facilitating drug marketing.

Here we plan to presents reviews focusing on drug repurposing centered, but not limited to, cancer diseases. In particular, the first review will be focused on drug repurposing in skin cancer, the second in leukemia, the third in ovarian cancer and the last in cardiac diseases. Despite being different each other, these pathologies have in common the need of more effective therapeutic approaches, which may be achieved via the strategy of drug repurposing.

##### **Subtopics:**

- Repurposing drugs for skin cancer.
- Repurposing drugs for leukemia.
- Repurposing drugs for to be announced.
- Repurposing drugs for ovary cancer.

**Keywords:**

Skin cancer, leukemia, ovary cancer.

**Schedule:**

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