

# Methodology of Drug discovery

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## Abstract

Western way of drug discovery has two major approaches. The first approach is screening and the second is targeting. Western way of drug discovery is different from Eastern way of drug discovery by which the Eastern way of drug discovery is testing by human but Western way of drug discovery is testing by *in-vitro* and *in-vivo* before clinical studies.

## Introduction

There are two major approaches for drug discovery. The first approach is screening. The concept is simple, some drugs have efficacy on treating disease with unknown mechanisms. The second approach is targeting. Biotechnology leads to a better understanding of structures, functions and interactions of genes, proteins and cells. Armed with this information, researchers can be more selective about what compounds to begin their screening with, or even design synthetic compounds for a specific target. One of the screening approaches is to isolate pure compounds from natural products and then testing their activities by *in-vitro* and *in-vivo* screening. Phytochemical study of a potential anti-tubercular Tibetan medicinal plant, *Gentianopsis paludosa* is an example of *in-vitro* screening<sup>1</sup>.

Eastern way of drug discovery is different from Western way of drug discovery. Shen Long, the divine farmer, tried and tested hundreds of herbs to know what their tastes, feelings and functions were and then recorded in Shen Long Ben Cao Jing. From the Book of Rites, son tried and tested the medicine before eating by their parents.. i.e. efficacy of medicine is not known but they were tried and tested my human by the first person and then promoted to others. This is the main different between western and eastern way of drug discovery in which western way of drug discovery in which western way of drug discovery uses secondary lives or things to test if they have efficacy and toxicity. A personal research and experience on treatment of eczema is an example<sup>2</sup>.

## References

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2. YEUNG Ming Fai, CHE Chun Tao, WONG Ren Gong. Personal Research and Experience on treatment of Eczema. *Natura Proda Medica*, **2008**, 1: 10-21.