

# Anticancer of Flower Extracts from 20 Herbaceous Plants

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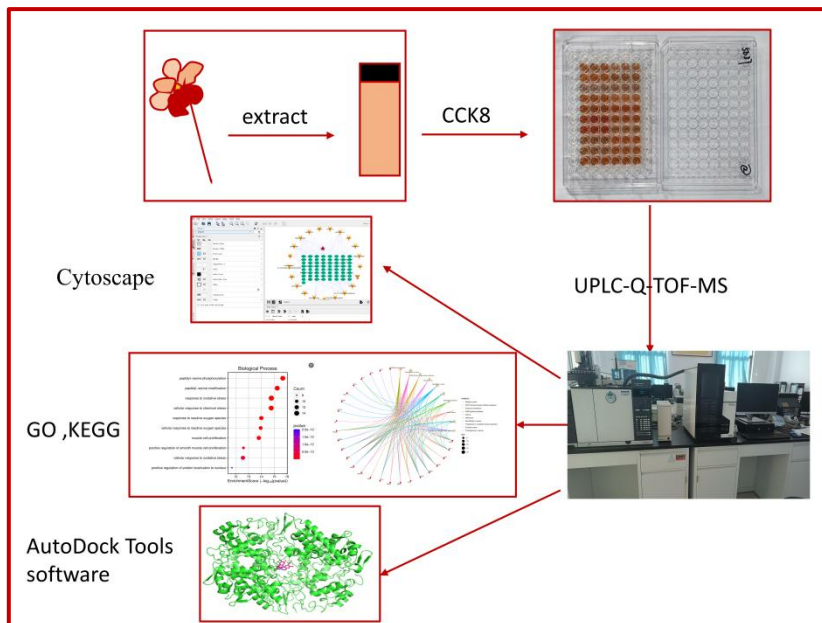
Received: 09 July 2025; Revised: 05 December 2025; Accepted: 20 December 2025

Type: Research article.

## Abstract

Bladder cancer is a malignant neoplasm of the urinary system, posing significant threats to human health. Bladder cancer is marked by a high incidence rate, a high mortality rate, and a strong propensity for recurrence after surgical intervention. Consequently, bladder infusion chemotherapy is often required. Plant extracts have the potential to be utilized in the treatment of cancer. The consumption of flowers is non-toxic and safe, and their anticancer properties are being gradually unveiled. The in vitro cytotoxicity assay was employed to assess the inhibitory effects of extracts from 20 species of herbaceous plant flowers on bladder cancer 5637 cells. Using ultra high performance liquid chromatography quadrupole time of flight mass spectrometry (UPLC-Q-TOF-MS) to analyze the compounds in the extracts of anticancer active substances in the extracts whose inhibition rate to bladder cancer 5637 cells is more than 90%, and using network pharmacology methods such as Cytoscape, GO enrichment analysis, KEGG pathway analysis, and AutoDock Tools software to analyze their anti-cancer mechanisms. This article discussed for the first time the inhibitory effect of 20 kinds of herbal flowers on the proliferation of bladder cancer 5637 cells and provided a scientific basis for the clinical drug development of cancer 5637.

## Table of Contents



*Innovative Description:* First explored: Inhibitory the rate and mechanism of 20 herbaceous flowers on bladder cancer 5637 cell proliferation.