

## عنوان مقاله:

A review of therapeutic potentials of milk thistle (*Silybum marianum* L.) and its main constituent, silymarin, on cancer, and their related patents

## محل انتشار:

مجله علوم پایه پزشکی ایران، دوره 25، شماره 10 (سال: 1401)

تعداد صفحات اصل مقاله: 11

## نویسندگان:

Emadi Emadi - *Pharmaceutical Research Center, Department of Pharmacodynamics and Toxicology, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran*

Mahboobeh Ghasemzadeh Rahbardar - *Pharmaceutical Research Center, Department of Pharmacodynamics and Toxicology, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran*

Soghra Mehri - *Pharmaceutical Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad, Iran*

Hossein Hosseinzadeh - *Pharmaceutical Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad, Iran*

## خلاصه مقاله:

For more than ۲۰۰۰ years, *Silybum marianum* L. (milk thistle) has been used for treating different complications such as jaundice, hepatitis, and cancers. It has also been shown that silymarin, a flavonolignan extract of the plant, demonstrates chemopreventive effects against cancers. This patent review presents and discusses recent patents concerning the anticancer effects of *S. marianum* and silymarin. The data were gathered by searching an extensive literature review conducted in Google Scholar, PubMed, Scopus, Google Patent, Patent Scope, and US Patent. Milk thistle and silymarin have been used in a variety of medical, therapeutic, and pharmaceutical fields, according to a large number of documents and patents. Milk thistle and silymarin have been used as complementary treatments for cancers such as skin, prostate, and colorectal cancers, as well as hepatoprotective agents. Silymarin exerts a chemopreventive effect on reactivating cell death pathways by modulation of the antiapoptotic proteins and synergizing with agonists of death domain receptors. Based on the results of these patents, silymarin could be beneficial to oncology patients, especially for the treatment of the side effects of anticancer chemotherapeutics. Following the human propensity to use phytocompounds rather than medicines based on chemical constituents, special attention must be paid to tie the value of milk thistle and silymarin from basic science to clinical applications.

## کلمات کلیدی:

Antineoplastic agents, Anti-Oxidants, Milk Thistle, Neoplasms, Pharmaceutical preparations, Plant extracts, *Silybum marianum* L, Silymarin

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1528881>



