

Phycocyanin - derived from blue green algae. available on amazon, common.

<https://www.sciencedirect.com/science/article/pii/S1756464622002158>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC6025048/>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC6627414/#:~:text=A%20wide%20range%20of%20investigations%20have%20suggested,in%20the%20potential%20treatment%20of%20human%20cancers.>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC5687155/>

Methylene Blue - probable cure - kill 90% of known cancers. all of em basically. take with Palmitoylethanolamide for incredible benefits and even more cancer killing power.

Licorice - stops growth

Zoldonrasib: This natural product-like compound stands out for its highly targeted approach. It has demonstrated the ability to successfully address the historically challenging RAS G12D mutation, which is prevalent in approximately 30% of NSCLC cases. Zoldonrasib achieves this by leveraging a unique protein-protein interface to selectively catalyze covalent bond formation with the mutated RAS protein, leading to "deep and durable tumor regressions" in preclinical models. Its precision in targeting a previously difficult-to-drug mutation makes it particularly promising.

Curcumin: Derived from *Curcuma longa*, curcumin shows broad anti-cancer activity by inducing various forms of cell death, including apoptosis, ferroptosis, and pyroptosis, in NSCLC cells. Its most compelling aspect is its strong synergistic potential with conventional chemotherapies. Preclinical studies show that curcumin can enhance the efficacy of drugs like Cisplatin, Crizotinib, Gefitinib, Gemcitabine, and Paclitaxel, often by overcoming drug resistance mechanisms (e.g., by modulating EGFR-related pathways or inhibiting autophagy). Notably, it has also been observed to neutralize the cytotoxic effects of Paclitaxel on healthy cells, suggesting a potential to improve the therapeutic index of existing treatments.

Chaihu Longgu Muli Decoction (CLM): This traditional Chinese medicine formula offers a unique approach by targeting the link between chronic stress and cancer progression. Preclinical studies in animal models have shown that CLM can inhibit chronic stress-induced lung cancer growth by suppressing the Rap1/ERK signaling pathway, which is activated by stress and promotes epithelial-mesenchymal transition (EMT) in lung cancer cells. Beyond its direct anti-tumor effects in stress-induced models, CLM has also demonstrated a synergistic anti-tumor effect when combined with the chemotherapeutic agent oxaliplatin. This highlights its potential as an adjuvant therapy that addresses systemic factors influencing cancer.

Dioscin: Sourced from *Rhizoma Dioscoreae Nipponicae*, Dioscin has shown significant promise by curtailing the expression of p-AKT, MMP2, and PCNA. In preclinical models, it effectively inhibits in vitro proliferation, invasion, and migration of lung cancer cells, and has demonstrated

a reduction in lung nodules, lung injury, and mortality in mouse models. This broad inhibitory effect on key cancer processes makes it a compelling candidate.

**Tanshinone and Tanshinone IIA:** These compounds, derived from *Salvia miltiorrhiza*, exhibit potent cell cycle modulation. Tanshinone induces G2/M phase arrest, increasing p53 and p21 expression and activating caspase-3/9 and PARP1, which collectively inhibit proliferation and promote apoptosis. Tanshinone IIA, on the other hand, induces G1/S phase arrest, impeding lung adenocarcinoma progression by downregulating key cell cycle regulators. Their direct impact on cancer cell proliferation and survival pathways highlights their therapeutic potential.

**Methylene Blue:** This synthetic dye has garnered attention for its potential in cancer therapy, particularly when used in conjunction with photodynamic therapy (PDT). In PDT, methylene blue accumulates in tumor tissues and, upon exposure to light, generates reactive oxygen species (ROS) that damage cellular components, leading to cancer cell death through apoptosis or necrosis. Studies suggest that methylene blue preferentially accumulates in cancer cells, potentially allowing for selective targeting. Beyond PDT, it also influences the tumor microenvironment by increasing oxygen levels within tumors, making cancer cells more susceptible to conventional treatments, and has shown anticancer activity by inhibiting Heat Shock Protein 70 (Hsp70) in preclinical models.

**Homoisoflavanone-1:** Isolated from *Polygonatum odoratum*, this compound has shown notable ability to inhibit NSCLC growth and induce apoptosis in a dose-dependent manner. It primarily achieves this by arresting the cell cycle in the G2/M phase through the activation of the p38/p53 signaling pathway.

**Imperatorin:** Derived from *Angelica dahurica*, Imperatorin exerts a robust inhibitory effect on lung cancer cell growth by upregulating p53 and Bax gene expression while downregulating Mcl-1.

**Licorice extract:** This extract has demonstrated the capacity to hinder NSCLC growth by downregulating the CDK4-Cyclin complex, effectively blocking cell progression from the G0 to G1 phase in tumor cells. Additionally, it has been observed to elevate PD-L1 protein abundance, which augments antigen presentation and fosters CD8+ T cell infiltration, suggesting an immunomodulatory effect.

"Huang Qin" is the pinyin name for *Scutellaria baicalensis* Georgi, commonly known as Baikal skullcap. It's a significant herb in Traditional Chinese Medicine (TCM) and has been extensively studied for its various pharmacological activities, including potent anti-cancer effects, particularly against lung cancer. The research on Huang Qin and lung cancer is robust and ongoing, with a strong focus on its active compounds and their molecular mechanisms, as well as its potential to complement conventional cancer therapies.

**Key Findings on Zhi Zi and Lung Cancer:**

Direct Anti-Cancer Effects on Lung Cancer Cells:

Studies have shown that extracts and active components from *Gardenia jasminoides* can inhibit the growth and proliferation of lung cancer cells.

They can also induce apoptosis (programmed cell death) in these cancer cells.

One review from 2023 specifically noted its anti-tumor role, "especially in anti colon cancer, anti liver cancer, anti breast cancer and anti lung cancer." (Source: "Research Progress on the Anticancer Effect and Mechanism of *Gardenia jasminoides* Ellis"). This indicates a recognized anti-lung cancer effect.

-----  
THIS IS WHAT I USED - ATTACKS CANCER IN AT LEAST 10 DIFFERENT WAYS!  
KILLS MOST OF THEM.

Recent research (2024-2025) on *Platycodon grandiflorus* (PF), or balloon flower, and lung cancer highlights its promising role, largely driven by its active compounds, particularly Platycodin D (PD), and polysaccharides (PGP).

Several 2025 studies focus on PD's direct impact on Non-Small Cell Lung Cancer (NSCLC). One paper investigates a novel cell membrane-coated PD to intervene in NSCLC progression by regulating specific molecular pathways. Another 2025 study explores PGP's anti-lung cancer activity, showing its ability to induce ferroptosis in lung cancer cells and inhibit their migration. Complementing these, a 2025 review article comprehensively summarizes PD's bioactivity, reiterating its recognized anti-tumor effects in lung cancer.

In 2024, research continued to uncover the mechanisms of PF. Studies showed PD's ability to induce apoptosis in colon cancer cells and a broader review highlighted PD's general anticancer potential across various cancer cell lines, emphasizing its mechanisms like inhibiting proliferation, inducing apoptosis, and suppressing angiogenesis. Another 2024 study, highly referenced, elucidated PD's anti-lung cancer activity via transcriptomics, implicating the TGF $\beta$  pathway.

Overall, the studies from 2024 and 2025 underscore that *Platycodon grandiflorus* components are actively researched for their direct anti-cancer effects, their precise molecular mechanisms, and novel delivery strategies in lung cancer.