

# gemini-conversation

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**User**

rank herbs found in attached file by efficacy in treating smoking related problems.

**Gemini**

Based on the pharmacological and experimental evidence provided in the attached file, the following herbs and plant-derived compounds are ranked by their efficacy in treating smoking-related problems (primarily chronic bronchitis and emphysema). The rankings are based on the clinical or experimental outcomes reported in the text.

**1. Platycodon grandiflorum (PG)**

This herb is highlighted as highly promising for treating **cigarette smoke-induced chronic bronchitis**.



**Efficacy:** Experimental validation showed it significantly alleviates pathological lung tissue damage, oxidative stress, and inflammation.



**Mechanism:** It contains eight bioactive compounds (such as Platycodin D and Polygalacin D) that inhibit the TLR4/MyD88/NF-κB signaling pathway.

**2. Senecio cannabifolius Less. (Feining Keli)**

Feining Keli is an herbal preparation primarily made from this plant and is used for **chronic bronchitis**.



**Efficacy:** Studies found "excellent therapeutic effects," including improved lung index and reduced pathological damage in models combined with smoking.



**Mechanism:** It reduces inflammatory response and oxidative stress through the PI3K/AKT and NF-κB/MyD88 pathways, with **quercetin-3-galactoside** identified as a key active component.

**3. Lilium lancifolium Thunb. (Root Extract)**

Research indicates this extract is a therapeutic candidate for **emphysema caused by cigarette smoke (CS)**.



**Efficacy:** In CS-exposed mouse models, it significantly inhibited the infiltration of inflammatory cells (macrophages and neutrophils) and reduced airspace enlargement (alveoli size).



**Mechanism:** It downregulates relative inflammatory factors like TNF- $\alpha$  and IL-6.



#### 4. *Scutellaria baicalensis* Georgi

**Efficacy:** Identified in a systematic review as a herb that affects multiple factors to improve **lung emphysema**, which is often caused by long-term smoking.



**Note:** It is classified alongside other high-performing phytochemicals like gallic acid and quercetin.



#### 5. *Forsythia suspensa* (Vahl) (FF)

**Efficacy:** Research showed it can alleviate **CS-induced pulmonary inflammation**.



**Mechanism:** It works through multiple mechanisms, including regulating intestinal flora and using caffeoyl quinic acids to reduce lung inflammation.



#### 6. *Monascus adlay*

**Efficacy:** Listed as an effective natural product for improving **pulmonary emphysema** due to its antioxidant and anti-inflammatory properties.



#### 7. *Caryocar coriaceum* (Pequi Tree)

**Efficacy:** The oil from this tree is used in popular medicine as an anti-inflammatory agent for **bronchitis** and bronchopulmonary infections.



#### 8. Suxiao Jiuxin Pill (SXD)

**Efficacy:** This Traditional Chinese Medicine formulation was studied for **acute bronchitis**.



**Mechanism:** It regulates the PI3K/Akt/NF- $\kappa$ B signaling pathway to reduce oxidative stress and inhibit cell death.



**Model Size:** 70B [This has source]

