



Scutellaria barbata

Health Care Professional Information

Scientific Name

Scutellaria barbata

Common Name

Barbat skullcap, Ban Zhi Lian, Banjiryun

Clinical Summary

Scutellaria barbata is a perennial herb prevalent in Korea and southern China. It is used along with other herbs in traditional Chinese medicine to treat bacterial infections, hepatitis, tumors, and as a diuretic. It should not be confused with *Scutellaria baicalensis*.

Data from in vitro studies suggest that *S. barbata* has antibacterial (1), antimutagenic (2), and anticancer (3) (4) (5) (6) (7) (8) (10) (11) (12) properties. The flavonoid components are thought responsible for the anticancer activity. Small studies of *S. barbata* show that it is safe and may benefit patients with advanced breast cancer (13) (14). Further research is needed.

Purported Uses

- Bacterial Infections
- Cancer treatment
- Hepatitis
- Hepatocellular Carcinoma

Constituents

- **Flavonoids:** Apigenin, Luteolin, Scutellarin, carthamidin, isocarthamidin, wogonin
- **Essential Oil:** Hexahydrofarnesyloetone, 3,7,11,15-tetramethyl-2-hexadecen-1-ol, Menthol, 1-octen-3-ol
- E-1-(4'-hydroxyphenyl)-but-1-en-3-one
- Pheophorbide
- Neoandrographolide

Mechanism of Action

In vitro studies have shown that *Scutellaria barbata* exerts anticancer effects via caspase-dependent apoptosis (6) (7) (8), and by downregulating Bcl-2 protein that is expressed by tumor cells (11). *S. barbata* also increased macrophage function in a murine carcinoma cell line that resulted in inhibition of tumor growth (3). It was shown to affect the metabolism of mutagenic compounds such as benzopyrene, thereby reducing their ability to bind DNA (2).

Contraindications

- Sensitivity to *Scutellaria barbata*
- Pregnancy

Adverse Reactions

None reported

Literature Summary and Critique

In vitro studies show that *S. barbata* has anticancer effects and phase I evaluation indicated safety of this herb. Further study is needed to determine efficacy.

Dosage (Inside MSKCC Only)

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References

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Consumer Information

How It Works

Bottom Line: *Scutellaria barbata* has been studied for its anticancer effects. More research is needed.

Scutellaria barbata is an herb found in Korea and southern China. It is used with other herbs in traditional Chinese medicine to treat bacterial infections, hepatitis, and tumors. Laboratory studies have shown *S. barbata* can limit the growth of cancer cells. It is also effective against some bacteria. Small studies show that *S. barbata* may benefit patients with advanced breast cancer. Further studies are needed.

Purported Uses

- **Hepatitis**

There is no scientific evidence to support this use.

- **Hepatocellular carcinoma**

Cell-based studies showed that *S. barbata* is effective, but data from human studies are lacking.

- **Bacterial Infections**

There is evidence from laboratory studies that supports this use.

- **Cancer treatment**

Several laboratory studies have shown that *S. barbata* has anticancer properties. Small studies report that it may have benefits in patients with advanced breast cancer.


Do Not Take If

- You are allergic to *S. barbata*
- You are pregnant

Side Effects

None reported

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E-mail your questions and comments to aboutherbs@mskcc.org .

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