

ECHINACEA ANGUSTIFOLIA

- Other species used E. Purpurea
- Purple coneflower
- Medicinal Parts
 - Roots and whole herb



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• Indications and Usage

Non-specific therapy to stimulate the immune system. It is used prophylactically and therapeutically in viral conditions with an emphasis on upper respiratory infections.

Known to act as an immune modulator

Potential to activate portions of the immune complement cascade

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• Effects

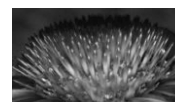
- Total extract has antiviral activity with an action equivalent to our biochemical interferon. This virostatic activity is particular against RNA (influenza) and DNA (herpes) viruses
- Promotes wound healing, old wounds, and ulcers that will not heal
- Elevates WBC counts and activity of the T lymphocytes
- Enhances macrophage phagocytosis and stimulates macrophages to produce increased TNF, interferon and interleukin

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- Animal studies confirmed a therapeutic effect against candida albicans
- Decreases inflammation in rheumatoid arthritis
- Caution in Acute Autoimmune Flare

- Increase in temperature
- May induce Fever



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- HOW SUPPLIED

- Ampoules for injection or sips
- 2ml 500 mg of fresh plant extract (Pascotox Forte-Injektapas)

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- DOSAGE

- Acute cases: IM 0.5-2.0ml start with 0.2 ml
 - Slowly increase up to 2.0 ml
- Chronic cases: IV or IM 2-3 x/weekly
 - 0.5-2.0ml
- The IV effect will be stronger.
- In patients who already have a fever the IM injection should be used.
- Children: IM only

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- PHARMACOLOGY

- Active constituent: Echinacoside, a glycoside with antibiotic properties.
- Available are the volatile oils, inulin, betaine, resins and other active principles.
- The combined effect of these constituents is the basis for the action.

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- ADVERSE REACTIONS TOXICOLOGY

- No toxicity observed at recommended doses
- Fresh press juice may cause fever (0.5-1 degree C)
- Test of E. purpurea demonstrated no mutagenic activity.
- Pregnancy: generally considered safe
- Drug interactions: None known

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3. Pascotox Forte Injectapas package insert.

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GLYCYRRHIZA GLABA

- Licorice

- Medicinal parts:
 - Roots and dried runners



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• Indications and Usage:

- HIV and AIDS: Nine symptom free HIV positive patients received 200-800 mg glycyrrhizin IV daily for 8 weeks. The group showed increased T-helper counts, better CD4:CD8 ratios and better liver function.² Six AIDS patients in another study received 400-1600 mg glycyrrhizin IV daily for 30 days, after which 5 or the six exhibited reduced or negative p24 antigen which indicates active disease.³
- Hepatitis: Chronic hepatitis B was treated with an IV combination product containing 0.2% glycyrrhizin, 0.1% cysteine and 2.0% glycine in saline. The product improved liver function and reduced liver enzyme levels. About 40% of patients experienced complete resolution.⁴
- PMS
- Addison's disease
- Inflammation
- Herpes simplex

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• HOW SUPPLIED

- Glycyrrhizic Extract, 8 mg/ml, 30 ml vial, preservative free
- Glycyrrhizic Extract, 2 mg/ml, 2 ml ampoule, Japanese form

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• DOSAGE

200-1600 mg glycyrrhizin have been given safely IV for 30-60 days. (Japanese study)

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• PHARMACOLOGY

- Most of the pharmacology focuses on glycyrrhizin and glycyrrhetinic acid
 - there are many other components like flavonoids that may have pharmacological effect.
 - Estrogenic activity
 - Pseudo Aldosterone activity
 - Antiallergic and anti-inflammatory
 - Antiviral and immunostimulatory
 - Antibacterial
 - Antihepatotoxic



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• ADVERSE REACTIONS TOXICOLOGY

- More than 3 grams per day licorice root for more than 6 weeks, or more than 100 mg per day glycyrrhizin may cause:
 - Sodium and water retention
 - Hypertension
 - Hypokalemia
 - Suppression of renin-aldosterone system
- Monitoring of blood pressure and electrolytes and increasing dietary potassium intake are suggested.

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- **CONTRAINDICATIONS**

- Patients with history of hypertension
- History of renal failure
- Current use of digitalis preparations.

- **Pregnancy:** Not recommended due to estrogenic like action of its isoflavones

- **Drug Interactions:** Digitalis

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2. Mori, K. et al. The Present Status in Prophylaxis and Treatment for HIV Infected Patients with Hemophilia in Japan. Rinsho Byori 37(11), 1200-1208, 1989.
3. Hattori T, et al. Preliminary Evidence for Inhibitory Effect of Glycyrrhizin on HIV Replication in Patients with AIDS. Antiviral Res 11(5-6), 255-261, 1989.
4. Acharya SK, et al. A preliminary Open Trial on Interferon Stimulator (SNMC) Derived from Glycyrrhiza glabra in the Treatment of Subacute Hepatic Failure. Ind J Med Res 98, 75-78, 1993.

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SILYBUM MARIANUM

- **Milk Thistle**

- Bull thistle, cardo blanco, Cardui mariae fructus, Cardui mariae herba, Cardum marianum L., Carduus marianus L., Chardon-Marie, emetic root, flavonolignans, Frauendistel, Fructus Silybi mariae, fruit de chardon Marie, heal thistle, holy thistle, iso silybinin, isosilybin, kanger, kocakavkas, kuub, lady's thistle, Legalon®, Marian thistle, mariana mariana, Mariendistel, Marienkroutenmer, Mary thistle, milk thistle, milk ipecac, naturasil, naturalium, Our Lady's thistle, pig leaves, royal thistle, shui fei ji, silydianin, Silybi mariae fructus, silybin, silybinin, silychristin, snake milk, sow thistle, St. Mary's thistle, thisilyn, Venue thistle, variegated thistle, wild artichoke

- **Medicinal parts**

- Seeds, fruit, leaves

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- **CONSTITUENTS**

- Flavone-lignan complex "silymarin" (incl. silybin, silydianin, silychristin).
- Flavonoids, including quercetin, kaempferol.
- Fixed oil, including linoleic acid, oleic acid.
- Other: Betaine, stigmasterol, sitosterol, mucilages; vitamins C, E and K.

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- **INDICATIONS AND USAGE**

- Liver disorders
- Hepatitis
- Cirrhosis
- Cholelithiasis
- Amanita phalloides (Death Cap mushroom) poisoning

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- HOW SUPPLIED

- Silymarin Extract, 50 mg/ml, 30 ml vial, preservative free
- Silymarin Extract, 50 mg/ml, 2 ml ampoule



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- DOSAGE

- IV 100-400 mg daily
- Oral 70-200 mg tid
- Best results are achieved at higher dosages

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- PHARMACOLOGY: Silymarin

- Antioxidant activity 10 X greater than vitamin E
- Stimulates growth of new liver cells to replace damage
- Increases liver Glutathione by over 35% in healthy individuals
- Inhibits lipooxygenase, preventing damage by leukotrienes
- Suppresses decomposition of membrane lipids
- Inhibits inflammation
- Stimulates liver protein synthesis

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- ADVERSE REACTIONS TOXICOLOGY

- No evidence of short or long term toxicity
- May produce loose stool secondary to choleretic activity

- Contraindications: None

- Pregnancy: Use with caution in pregnancy as hormone metabolism may increase due to improved liver function

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- Drug Interactions:

- Long term use may effect dose requirements of some drugs due to improved liver function
- herb affecting drug toxicity: Acetaminophen, Butyrophenones, Dilantin, Ethanol, Halothane, Phenothiazines, major anesthetics and others.

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- Chemotherapy

- reducing the toxic side effects of chemotherapeutic agents and in working synergistically with the drugs to enhance therapeutic effects. For example, silymarin compounds have been found to reduce the typical toxic effects of cisplatin upon the kidneys in test tubes and in animals without compromising the drug's anti-tumor activity. Similar tests involving adriamycin have found similar results

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- Alpha Lipoic Acid and Selenium

- Symptomatic hepatitis C patients with elevated transaminases were placed on a triple antioxidant therapy comprising alpha lipoic acid, selenium and Silybum marianum (milk thistle)
 - all were spared hepatic transplantation, showed improved laboratory indices, and returned to normal working life.

Synergy: Multiple antioxidant therapy combining alpha lipoic acid with other antioxidant agents such as selenium and the herb milk thistle is synergistic in hepatitis C therapy and may provide cost-effective alternative approaches, even in cases with poor prognosis.

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VISCUM ALBUM (Iscucin)

- The following are from the various host trees that the mistletoe grows with

-due to its nature as a parasitic plant with no true roots



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- These types will offer possibilities for different therapy modalities

- Abietis
 - Esophageal, stomach, colon, rectal cancer.
 - Predominant use in male patients
- Crataegi
 - Non organ specific tumors
 - Myocardial infarction prophylaxis
 - Coronary sclerosis and myocardial degeneration
- Pini (Pinus)
 - Skin tumors, breast carcinoma(post menopausal women)
 - Inoperable brain tumors
 - Predominate use in male patients



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- Mali (Malus)
 - Carcinomas, sarcomas, lymphogranulomatosis, leucosis,
 - Breast, uterine and potential for use in prostate
 - Predominate use in females patients
- Populi
 - Prostate carcinoma
 - General tumor treatment
- Quercus
 - Carcinoma, sarcoma, lymphogranulomatosis, leucosis
 - Predominate use in male patients
- Salicis
 - Precancerous conditions, kidney tumors, primary chronic polyarthritis and arthrosis deformans
- Tiliae
 - Kidney and lung tumors
- Ulmus

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- INDICATIONS

Diabetes

HIV

Preventative Myocardial degeneration, and sclerosing

Solid Tumors

Cervix, ovarian, vaginal, breast, prostate, stomach, colon, bronchi and brain

Precancerous conditions and post-operative tumor treatment

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- **COMPLICATIONS**

Sustained elevated temperature with chills,
headache general malaise.

Accelerated tumor intoxication , potential of
undetected metastasis

Increase of inflammation at a given site

Local irritations

Necrosis

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- **DRUG INTERACTIONS: MAOI**

- contains tyramine

- (Tyramine is an amino acid which is found in various foods and is an indirect sympathomimetic that can cause a hypertensive reaction in patients receiving MAOI therapy)

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- **CONTRAINDICATIONS**

Pregnancy

Dysmenorrhea,

Epilepsy

Migraine

Brain concussions

Acute febrile conditions

Influenza

Protein hypersensitivity (TB)

Allergy

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- **TREATMENT**

- * The use of these therapies should be after considerable consideration of risks in tumors which are already inoperable.

- Dosage and frequency of injections should then be recalculated according to condition and general state of health.

- Goal during Viscum treatment is to raise the body temperature by 0.5 to 0.9 degrees F

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- **TYPICAL INJECTIONS**

- Subcutaneous

- Multiple series

- Daily injections for 2 weeks

.0001 mg, .001 mg, 0.01 mg,

1 mg, 10 mg., 20mg, 30 mg., 50 mg/ml

Available with mineral salts at 10^{-8} of AgCO_3 ,
 CuCO_3 , and HgSO_4

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OTHER BOTANICALS

- *Aesculus Hippocastanum*/Horse Chestnut
- *Crataegus Oxyacantha*/Hawthorne
- Pycnogenol

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