

**Could Traditional Chinese Medicine
speed up the blood cancer patient
recovery after chemo-radio-therapy?**

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Szent-Györgyi Prize for Progress in Cancer Research

BETHESDA, Maryland, January 24, 2012



What is Traditional Chinese Medicine?

Traditional Chinese Medicine (TCM) is rooted in the ancient philosophy of Taoism and dates back more than 2,500 years in China.

Although the exact number of people who use TCM in the United States is unknown, it was estimated in 1997 that some 10,000 practitioners served more than 1 million patients each year. According to the 2007 National Health Interview Survey (NHIS), which included a comprehensive survey on the use of complementary health approaches by Americans, an estimated 3.1 million U.S. adults had used acupuncture in the previous year. The number of visits to acupuncturists tripled between 1997 and 2007. (NIH, NCCIH)

The ancient beliefs on which TCM is based include the following:

- The human body is a miniature version of the larger, surrounding universe.
- Harmony between two opposing yet complementary forces, called *yin* and *yang*, supports health, and disease results from an imbalance between these forces.
- Five elements—fire, earth, wood, metal, and water—symbolically represent all phenomena, including the stages of human life, and explain the functioning of the body and how it changes during disease.
- Qi, a vital energy that flows through the body, performs multiple functions in maintaining health.

How does it work?

TCM focus on correcting imbalances by stimulating the body's natural ability to heal itself. In other words, TCM focus on ill body, not disease itself.

The three main professionally applied methods of re-establishing balance are Chinese herbal medicine, acupuncture and moxibustion.

- **Chinese herbal medicine.** The Chinese *Materia Medica* (a pharmacological reference book used by TCM practitioners) describes thousands of medicinal substances—primarily plants, but also some minerals and animal products. Different parts of plants, such as the leaves, roots, stems, flowers, and seeds, are used. In TCM, herbs are often combined in formulas and given as teas, capsules, liquid extracts, granules, or powders.
- **Acupuncture.** Acupuncture is a family of procedures involving the stimulation of specific points on the body using a variety of techniques. The acupuncture technique that has been most often studied scientifically involves penetrating the skin with thin, solid, metal needles that are manipulated by the hands or by electrical stimulation.
- **Moxibustion.** Moxibustion is a form of heat therapy in which dried plant materials called "moxa" are burned on or very near the surface of the skin. The intention is to warm and invigorate the flow of Qi in the body and dispel certain pathogenic influences. Moxa is usually made from the dried leafy material of Chinese mugwort (*Artemesia argyi* or *A. vulgaris*), but it can be made of other substances as well.

Review recent study on the role of TCM treatment for cancer patient

(all research paper from
<http://www.ncbi.nlm.nih.gov/>)

[Evid Based Complement Alternat Med.](#) 2014;2014:494136. doi:
10.1155/2014/494136. Epub 2014 Aug 27.

The effects of herbs and fruits on leukaemia.

[Saedi TA](#), [Md Noor S](#), [Ismail P](#), [Othman F](#).

Author information

Institute of Bioscience, Universiti Putra Malaysia, Malaysia ; Department of Human Anatomy, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia (UPM), 43400 Serdang, Selangor Darul Ehsan, Malaysia.

Hibiscus cannabinus (Kenaf), Ginseng Root, Euphorbia formosana Hayata (EF),
Garlic (Allium sativum), Moringa oleifera , Vernonia amygdalina,
Achillea fragrantissima (Af), Typhonium flagelliforme

[Planta Med.](#) 2010 Oct;76(14):1525-9. doi: 10.1055/s-0029-1241003. Epub 2010 Mar 22.

Fo shou san, an ancient herbal decoction prepared from rhizoma chuanxiong and radix angelicae sinensis, stimulates the production of hemoglobin and erythropoietin in cultured cells.

[Bi CW](#)¹, [Xie HQ](#), [Xu L](#), [Li J](#), [Cheung AW](#), [Zhu JT](#), [Zheng YZ](#), [Chen VP](#), [Lau DT](#), [Choi RC](#), [Wang TJ](#), [Dong TT](#), [Tsim KW](#).

Author information

¹Department of Biology and Center for Chinese Medicine, The Hong Kong University of Science and Technology, Hong Kong, People's Republic of China.

The research shows that application of **FSS (Chuan Xiong and Dang Gui)** in cultured K562 human leukemia cells inhibited cell proliferation and subsequently induced the production of hemoglobin.

[Nat Prod Commun.](#) 2009 Aug;4(8):1025-30.

Antiproliferative activities of five Chinese medicinal herbs and active compounds in *Elephantopus scaber*.

[Su M](#)¹, [Wu X](#), [Chung HY](#), [Li Y](#), [Ye W](#).

Author information

¹Department of Biology, The Chinese University of Hong Kong, Hong Kong, China.

The result shows that ***Elephantopus scaber* (Di Dan Cao)** can suppress HL-60 (human acute promyelocytic leukemia cell) activities.

[Blood](#). 2008 Feb 15;111(4):2354-63. Epub 2007 Dec 10.

Wogonin preferentially kills malignant lymphocytes and suppresses T-cell tumor growth by inducing PLCgamma1- and Ca²⁺-dependent apoptosis.

[Baumann S](#)¹, [Fas SC](#), [Giais M](#), [Müller WW](#), [Merling A](#), [Gülow K](#), [Edler L](#), [Krammer PH](#), [Li-Weber M](#).

Author information

¹Tumorimmunology Program (D030), German Cancer Research Center, Heidelberg, Germany.

In this study, the data show a therapeutic potential of **Wogonin** for the treatment of hematologic malignancies. Wogonin is derived from the traditional Chinese medicine

Huang-Qin (*Scutellaria baicalensis* Georgi). Importantly, Wogonin shows almost no toxicity on T lymphocytes from healthy donors.

[Blood](#). 2007 Apr 15;109(8):3441-50. Epub 2006 Dec 29.

Oridonin, a diterpenoid extracted from medicinal herbs, targets AML1-ETO fusion protein and shows potent antitumor activity with low adverse effects on t(8;21) leukemia in vitro and in vivo.

[Zhou GB](#)¹, [Kang H](#), [Wang L](#), [Gao L](#), [Liu P](#), [Xie J](#), [Zhang FX](#), [Weng XQ](#), [Shen ZX](#), [Chen J](#), [Gu LJ](#), [Yan M](#), [Zhang DE](#), [Chen SJ](#), [Wang ZY](#), [Chen Z](#).

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¹State Key Laboratory of Medical Genomics and Shanghai Institute of Hematology, Rui Jin Hospital, Shanghai Jiao Tong University School of Medicine, 197 Ruijin Road II, Shanghai 200025, China.

These results suggest that **Oridonin (Dong Ling Cao)** may be a potential antileukemia agent that targets AE oncoprotein at residue D188 with low adverse effect, and may be helpful for the treatment of patients with acute myeloid leukemic (AML).

[Zhong Xi Yi Jie He Xue Bao](#). 2006 Sep;4(5):485-9.

Evidence for Oldenlandia diffusa-evoked cancer cell apoptosis through superoxide burst and caspase activation.

[Yadav SK](#)¹, [Lee SC](#).

Author information

¹Yong Loo Lin School of Medicine, National University of Singapore, Singapore 117597.

Oldenlandia diffusa (Bai Hua She She Cao) is one of the herbs most commonly used in traditional Chinese medicine for treating cancer. The results show that the ethanol extract of the Oldenlandia diffusa effectively evokes human promyelocytic leukemia cell line HL60 cells apoptosis.

[Life Sci.](#) 2004 Jul 2;75(7):797-808.

Cytotoxic activities of *Coriolus versicolor* (Yunzhi) extract on human leukemia and lymphoma cells by induction of apoptosis.

[Lau CB](#)¹, [Ho CY](#), [Kim CF](#), [Leung KN](#), [Fung KP](#), [Tse TF](#), [Chan HH](#), [Chow MS](#).

Author information

¹School of Pharmacy, The Chinese University of Hong Kong, Shatin, New Territories, Hong Kong.

The ***Coriolus versicolor* (Yunzhi)** extract was found to selectively and dose-dependently inhibit the proliferation of lymphoma and leukemic cells.

[J Cell Biochem Suppl.](#) 1997;27:106-12.

Initial study on naturally occurring products from traditional Chinese herbs and vegetables for chemoprevention.

[Zheng S](#)¹, [Yang H](#), [Zhang S](#), [Wang X](#), [Yu L](#), [Lu J](#), [Li J](#).

Author information

¹Cancer Institute, Zhejiang Medical University, Hangzhou, China.

The results suggest that induction of apoptosis may contribute to the mechanisms of antitumor activity of **Elemene** (isolated from the Chinese medicinal herb *Rhizoma zedoariae*, **Er Zhu**) and Allicin, which merit investigation as potential chemoprevention agents in humans.

[Biomed Res Int](#). 2014;2014:364625. doi: 10.1155/2014/364625. Epub 2014 Jun 5.
Potential mitochondrial isocitrate dehydrogenase R140Q mutant inhibitor from traditional Chinese medicine against cancers.

[Lee WY](#), [Chen KC](#), [Chen HY](#), [Chen CY](#).

Author information

Department of Biomedical Informatics, Asia University, Taichung 41354, Taiwan ;
School of Medicine, College of Medicine, China Medical University, Taichung 40402, Taiwan ; Department of Neurosurgery, China Medical University Hospital, Taichung 40447, Taiwan.

This study shows that the top two TCM compounds, **Precatorine** and **Abrine**, are the potential inhibitor for IDH1 and 2 genes (can induce acute myelogenous leukemia).

[J Tradit Chin Med.](#) 2014 Oct;34(5):550-4.

Efficacy of saam acupuncture treatment on improvement of immune cell numbers in cancerpatients: a pilot study.

[Kim DJ](#), [Park SH](#), [Seo JC](#), [Kim KS](#), [Sohn KC](#), [Shin IH](#), [Ryoo HM](#).

Ten cancer patients were analyzed for improvements in immunity. Acupuncture was applied at the 5 acupuncturepoints, Jingqu (LU 8), Zutonggu (BL 66), Yanggu (SI 5), Yangchi (TE 4), and Zhongwan (CV 12) for 2 weeks with 4 sessions. We assessed the effect of acupuncture on the immune system in cancer patients by measuring particular blood cell subsets. The results show that acupuncture may improve the immune system by increasing the counts of a few immune cells and relieve fatigue in cancer patients.

[Chin J Integr Med.](#) 2014 Feb;20(2):136-47. doi: 10.1007/s11655-013-1439-1.
Epub 2013 Dec 13.

**Effectiveness of acupuncture for palliative care in cancer patients:
a systematic review.**

[Lian WL](#)¹, [Pan MQ](#), [Zhou DH](#), [Zhang ZJ](#).

Author information

¹School of Chinese Medicine, LKS Faculty of Medicine, University of Hong Kong, Hong Kong, China.

The result of this systematic review suggested that the effectiveness of acupuncture in palliative care for cancer patients is promising, especially in reducing chemotherapy or radio therapy induced side effects and cancer pain. Acupuncture may be an appropriate adjunctive treatment for palliative care.

[Integr Cancer Ther.](#) 2014 Mar;13(2):133-40. doi: 10.1177/1534735413510558.
Epub 2013 Nov 25.

**Acupuncture for treatment of uncontrolled pain in cancer patients:
a pragmatic pilot study.**

[Garcia MK](#)¹, [Driver L](#), [Haddad R](#), [Lee R](#), [Palmer JL](#), [Wei Q](#), [Frenkel M](#), [Cohen L](#).

Author information

¹The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

Participants experiencing pain ≥ 4 on a 0 to 10 numeric rating scale received a maximum of 10 treatments on an individualized basis. The result show that acupuncture was feasible, safe, and a helpful treatment adjunct for cancer patients experiencing uncontrolled pain in this study.

[Integr Cancer Ther.](#) 2014 Sep;13(5):371-85. doi: 10.1177/1534735413520181.
Epub 2014 Feb 4.

Acupuncture in the treatment of cancer- related psychological symptoms.

[Haddad NE](#), [Palesh O](#).

Author information

Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, Stanford, CA, USA

This article reviews the current literature (January 2000 through April 2013) for acupuncture in cancer-related psychological symptoms with attention to both efficacy and acupuncture-specific methodology. All published studies that met the review criteria demonstrate a positive signal for acupuncture for the treatment of depression, anxiety, sleep disturbance, and for improving quality of life with most results showing statistical significance. Published studies in cancer patients and survivors show that acupuncture treatment is not only safe but also more acceptable with fewer side effects than standard of care pharmacological treatments like antidepressants.

[Asian Pac J Cancer Prev](#). 2014;15(7):3139-44.

Acupuncture as

a complementary treatment for cancer patients receiving chemotherapy.

[Tas D](#)¹, [Uncu D](#), [Sendur MA](#), [Koca N](#), [Zengin N](#).

Author information

¹Traditional, Complementary and Alternative Medicine Department, Ministry of Health, Ankara, Turkey

A total of 45 inpatients who underwent chemotherapy. Acupuncture was administered to the patients one day prior to chemotherapy, on the day of chemotherapy and one day after chemotherapy. The patients were evaluated on nausea, vomiting, pain, sleep quality and anxiety before the chemotherapy and on the 4th day of chemotherapy.

This study showed that acupuncture has positive effects in cancer treatment patients who experience nausea, vomiting, pain, poor sleep quality and anxiety as side effects of chemotherapy. Chemotherapy-related side effects in cancer patients could be decreased by the concurrent use of acupuncture.

How does TCM do for cancer patient?

Based on Chinese medicine conception, the origin of cancer is considered to be mainly due to lack of “Zheng Qi,” immune system deficiency and accumulation of “Xie Qi,” pathogenic factors. TCM suggests that cancer is an outcome of an imbalance of body, mind, and spirit; thus, it requires a multimodal treatment approach that involves lifestyle modification, herbal prescription, acupuncture, moxibustion, traditional exercise, and meditation to restore the balance. As showed above, experimental and clinical Chinese medicine therapies have demonstrated that TCM are effective for supporting patients going through in various stages.

Clinical case

B., female, 60yd, nurse. She was diagnosed with Stage IV Cancer on June, 2013. 2 large cancers were removed, one from the lung and another from the brain. The surgeries were followed by chemotherapy and radiation. Her body and mind felt like she was hit with a “mach truck”. As she told, more than half with this diagnosis die within the first year and her prognosis is less than 4% for a 5 year survival rate. After her last Chemo, she began TCM treatment. Before acupuncture and herbs treatment, she felt fatigue, low appetite, insomnia, anxiety, depression. Post chemo, she suffered from neuropathy and her muscle tore easily. She began acupuncture twice a week for 5 weeks and then once every week for one year. Because she felt really well, she continued treatment once every two weeks until now (altogether 1 year and a half so far). Now her numbness stopped completely and burning and electrical activity in her hands and feet are much improved. Her energy, appetite, sleeping and emotion are all normal. She believes, considering the severity of her disease she will continue to benefit from both West and East medicine.