



Medicinal Dietetic Soup Pack Developed by HKU School of Chinese Medicine Shows Initial Success in Ameliorating Chemotherapy Side Effects

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Outline

- ❖ **Background**
- ❖ **Research Methods and Results**
 - Randomised, controlled clinical trial
 - Laboratory experiments
- ❖ **Significance**

Background



- According to data from Hong Kong Cancer Registry, Hospital Authority, there has been a 14% rise in the incidence rate of cancer in Hong Kong, from 25,977 cases in 2009 to 29,618 cases in 2014.
- World Cancer Report 2014 released by World Health Organization (WHO) estimated that there will be nearly 25 million cancer cases over the next two decades worldwide.
- With advances in cancer diagnosis and treatment the survival rate of cancer patients has been increasing, yet the side effects of chemotherapy are obvious and affect the quality of life of patients.

Background



Controversy: whether chemotherapy should be continued to use?

- Efficacy
- Dosage
- Side-effects
 - Lung toxicity (fever, shortness of breath, cough)
 - Neurotoxicity (damage to the central nervous system, and the peripheral nerves)
 - Hair loss
 - Local reactions (phlebitis and local tissue necrosis)
 - Nephrotoxicity, liver damage, cardiotoxicity
 - Bone marrow suppression
 - Gastrointestinal mucosal toxicity (loss of appetite, nausea, vomiting)
 - Low immune function

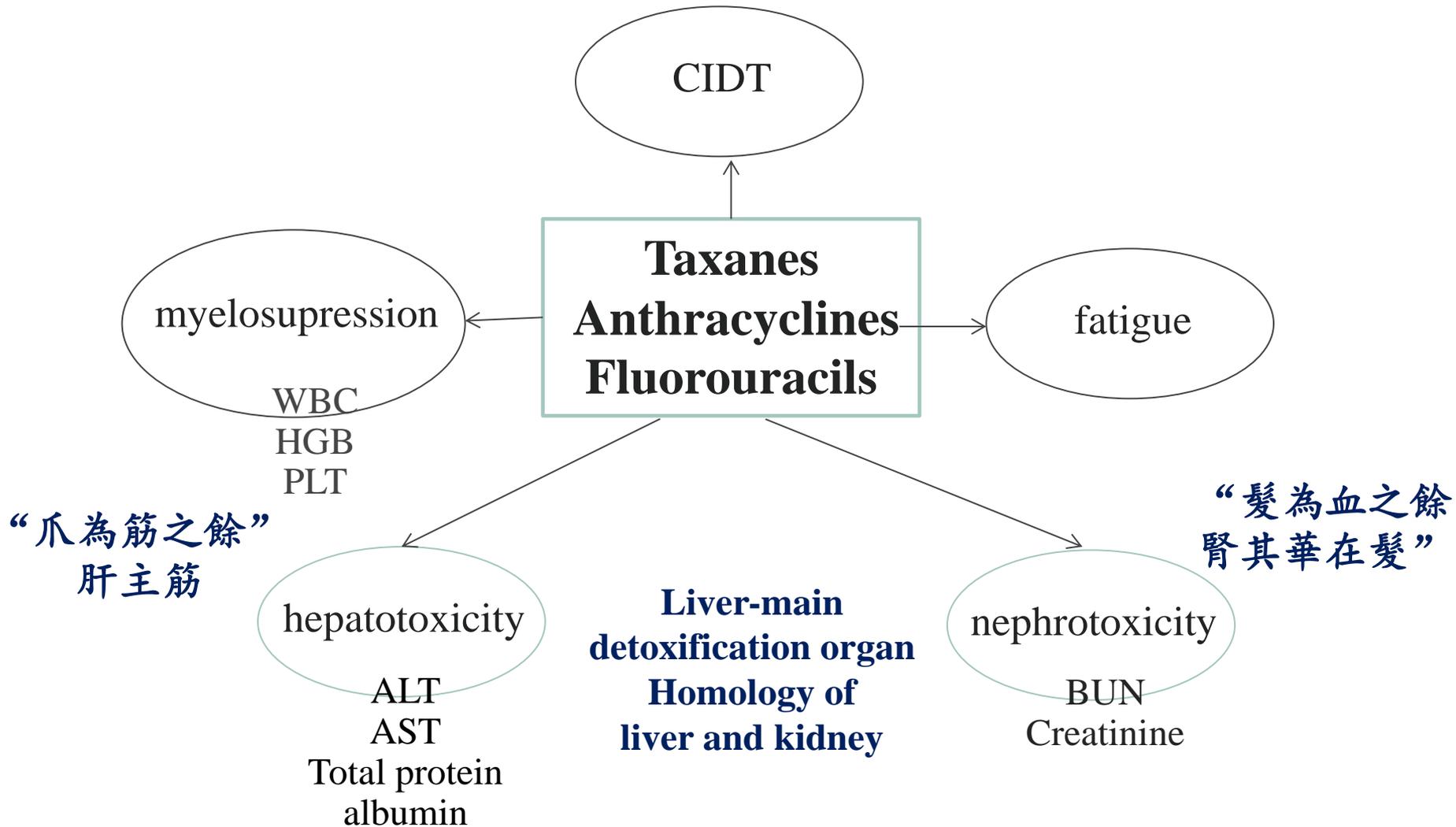
Background

More than 30 chemotherapeutic drugs cause **Chemotherapy-induced dermatologic toxicity (CIDT)**, a major side effect of chemotherapy, in which Taxanes, Anthracyclines and Fluorouracils are more obvious. CIDT causes considerable cosmetic problems, pain, infection, functional impairment and affect the quality of life.

pruritus	
dry skin	
pain of skin	
skin ulceration	

alopecia	
skin hyperpigmentation	
nail discoloration	
nail loss	

Background



Background

~~individual
compound~~

Chinese
herbs

Medical
Food



The research team developed the medicinal dietetic soup pack based on the theory “homology of medicine and food”, ancient prescription, and a series of laboratory experiments and clinical trials. The researchers hope the dietetic therapy can reduce the side effects of chemotherapy and improve the quality of life of patients.



Black soybean - detoxification

Coarse cereals - improve immune function

Phycomycetes - detoxification, antioxidation



Background

- The research has started since 2015 and recruited patients of any kind of cancer who have started their first chemotherapy, have been receiving chemotherapy or completed chemotherapy for no more than 2 weeks.
- The research team has now recruited 140 cancer patients. They were assigned to soup pack group or control group, and they are required to take the soup for at least six weeks.

Research Methods and Results

◆ Hypothesis:

The YH0618 soup would ameliorate chemotherapy-induced toxicity (including dermatologic toxicity, myelosuppression, hepatotoxicity and nephrotoxicity) without interfering with antitumor activity.

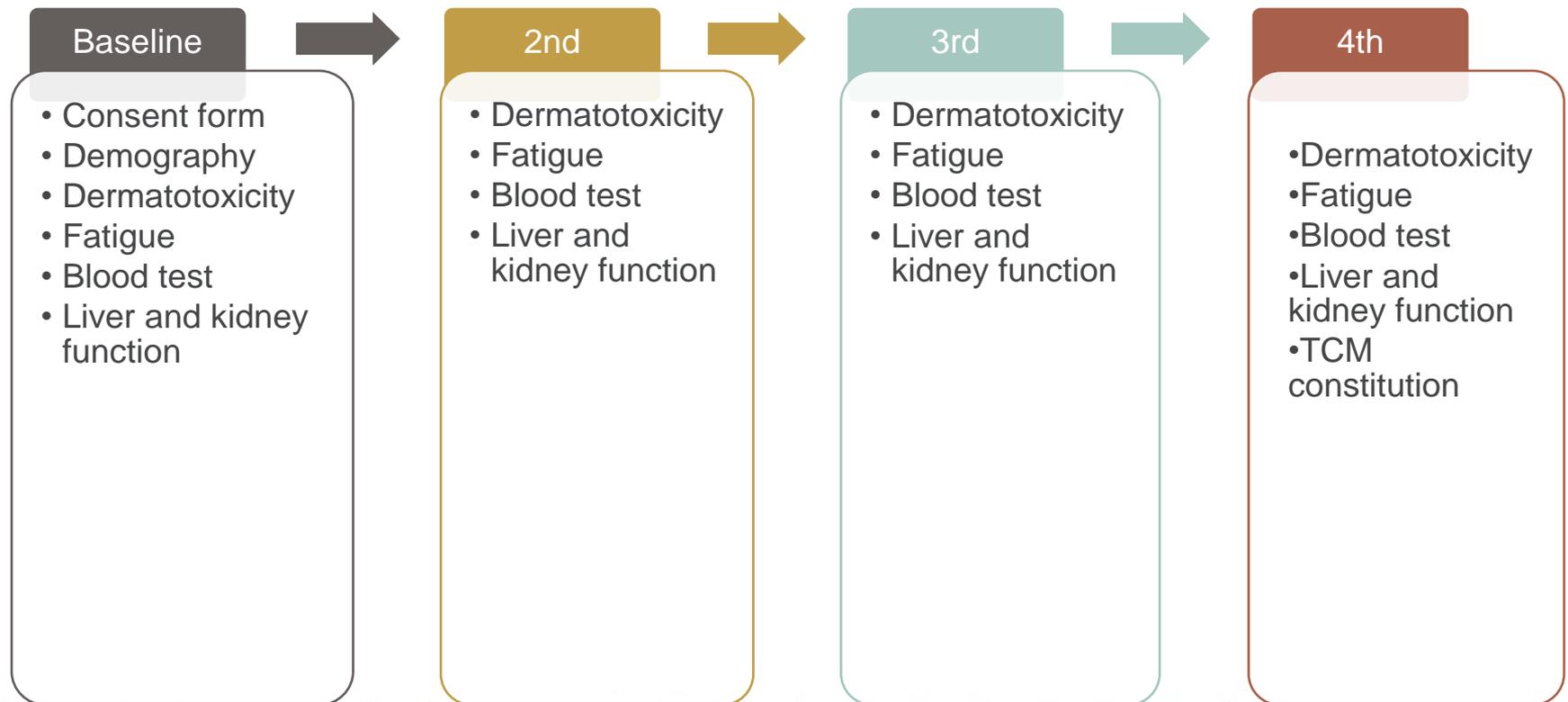
◆ Objectives:

- 1) To determine whether YH0618 would be more effective than wait-list control condition on ameliorating chemotherapy-induced toxicity by a randomized controlled trial.
- 2) To evaluate whether YH0618 soup would ameliorate chemotherapy-induced toxicity and interfere with antitumor activity of chemotherapeutic drugs by *in vitro* and *in vivo* experiments.
- 3) To explore the possible mechanism of YH0618 soup in ameliorating chemotherapy-induced toxicity.

Clinical Trial

Participants' criteria:

- 1) Patients of any kind of cancer, who will start their first chemotherapy, are receiving chemotherapy or completed chemotherapy for no more than 2 weeks;
- 2) Chemotherapy drugs include taxanes, or anthracyclines, or Fluorouracils;
- 3) A life expectancy at least 6 months.



Clinical Trail Results

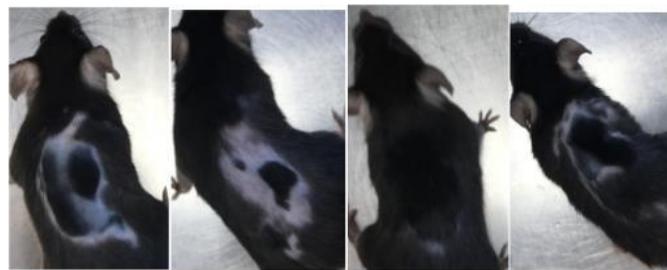
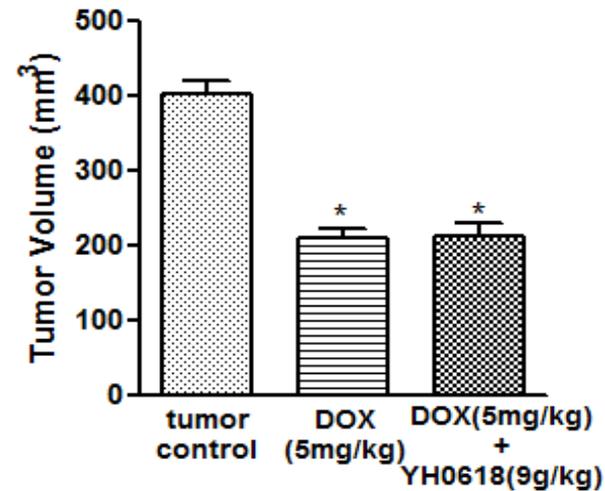
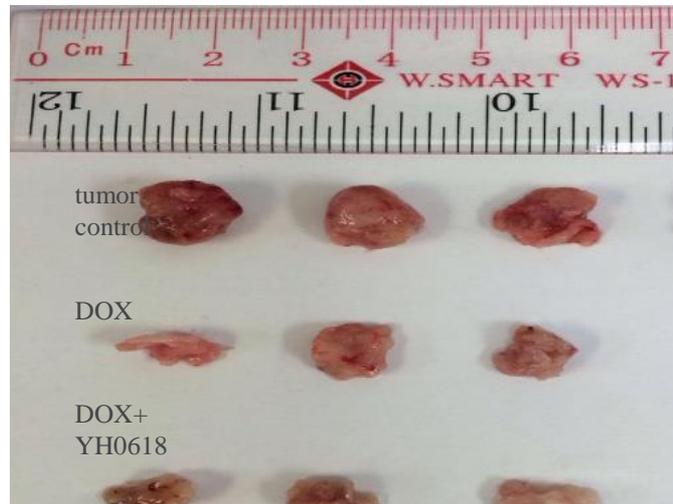
The mid-term results of 100 participants who completed the clinical trial indicate that the soup could prevent and ameliorate the side effects of chemotherapy. The soup significantly increases the rate of hair growth, improves nail and skin discoloration, reduces fatigue, as well as white blood cells induced by chemotherapy.



YH0618 Soup Pack Group

Control Group

Laboratory Experiments Results



Control

DOX

YH0618

DOX+YH0618

Table 1 Effect of YH0618 on WBC and RBC in peripheral blood of MMTV-PyMT(+/-) female mice

Group	WBC ($10^6/L$)	RBC ($10^{12}/L$)
Negative control	5.06 ± 0.07 #	10.08 ± 0.14 #
Tumor control	5.58 ± 0.13	10.66 ± 0.14
Tumor+Dox (5mg/kg)	1.02 ± 0.01 #	5.75 ± 0.17 #
Tumor+Dox (5mg/kg)+YH0618 (9g/kg)	1.32 ± 0.35 #*	7.00 ± 0.02 #*

Significance

- It is convenient, natural, safe to use and suitable for everyone with different physiques as it is neutral. It does not affect the efficacy of western medical treatment.
- It is expected to become a standard treatment to ameliorate chemotherapy-induced side effects.
- Reduce the rate of not receiving standardised treatments on time.
- Reduce the financial burden of patients and significantly improve their quality of life.



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Other research team members:

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- Ms YOU Jie-shu, PhD student, School of Chinese Medicine, Li Ka Shing Faculty of Medicine, HKU
- Ms He Yan-hua, Research Assistant, School of Chinese Medicine, Li Ka Shing Faculty of Medicine, HKU



招募通知

食物湯包對化療毒副作用的臨床研究

香港大學中醫藥學院正開展有關「食物湯包減少癌症患者化療毒副作用的臨床研究」。食物湯包由日常食物組成，所有成分均有安全的使用歷史。這些食物在長期的臨床應用中表現出可能減少由化療引起的毒副作用。

◆ 研究內容：

參與者將被隨機分配到湯包組或輪候對照組中的任意一組，需服用湯包至少6周以上。所有參與者將進行健康評估，所有的評估均為無創，不會對身體造成傷害。此外，參與者需在規定日期上交指定的醫院檢測結果副本（化療期間常規檢測，包括血常規、肝腎功能）。

◆ 參與條件：

- (1) 任何類型和分期的癌症患者；
- (2) 即將開始化療、化療中或剛結束化療2周內

◆ 研究地點：

香港大學中醫藥學院專科臨床教研中心
(香港灣仔林沙宣道10號地下)

研究期間所提供的湯包費用全免

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請電話聯繫：9032 9861 或 3917 6510
或 Email: youjs88@hku.hk
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Patient's Sharing

Q&A Session

Thank you!