

# Phytohealth Corporation

**Taiwan Stock Exchange (symbol:4108)**

**2023 Institutional Investor Conference**

**Established: 1998**

**Stock Exchange Listed: 2008**

**Capitalization: USD 70M**

**Chairperson: Yili Lee**

CEO

Angel Lee



懷特生技新藥(股)公司  
PhytoHealth Corporation

# Statement

1. Apart from historical data, the matters listed in this presentation that are forward-looking statements may be subject to significant risks and uncertainties, which could result in differences between these forward-looking statements and actual outcomes.
2. The future projections presented in this document reflect the company's views as of the current date. However, the company is not obligated to update this information in case of any events or changes in the environment.
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4. The content of this presentation includes all entities belonging to the consolidated financial statements.



# Company Profile



懷特生技新藥(股)公司  
PhytoHealth Corporation

***PhytoHealth aims to apply the latest pharmaceutical drug development techniques to innovate natural treatments used for thousands of years in Chinese botanical medicine practices to satisfy the unmet clinical needs.***



# Key milestones of Phytohealth Corporation

1998

Company established

2002

Company public listing

Listed on OTC as the first new drug R&D company

2008

- 1st botanical drug NDA approval (PG2®)
- Completion of Botanical Drug API Plant

- API manufacturing factory attained PIC/S GMP approval
- Completed PG2 Phase IV study and results published to the SCI journal

- 1st oral nalbuphine received NDA approval (Oraphine®)
- PG2 granted the reimbursement price by National Health Insurance

2009  
~  
2012

2013  
~  
2016

2017  
~  
2023



# PhytoHealth Project Pipeline

Product Function / Indication	Pre-Clinical	Phase I	Phase II	Phase III	NDA	Approval
<b>On Market</b>	PG2® Injection 懷特血寶 Cancer-Related Fatigue	Taiwan TFDA NDA approved and product launched				
	Oraphine® 懷特痛寶 Treat moderate to severe Pain	TFDA NDA approved and product listing				
<b>Research and Development</b>	PHN031 懷特骨寶 Osteoporosis Prevention	USA FDA Phase II IND#78,123				
	PHN033 懷特糖寶 Diabetic Nephropathy	USA FDA Phase II IND#106,198				
	PG2 Combo Therapy in Cancer	Phase II study				
	PG2 against COVID-19 induced cytokine storm	Pilot study				

 Ready for licensing



**The global market for botanical and plant-derived drugs has show continual growth over the last decade and is showing promise to continue moving forward at steady pace.**

\*Botanical and Plant-derived Drugs: Global Markets, BCC Research

**\$38B**

USD in 2023

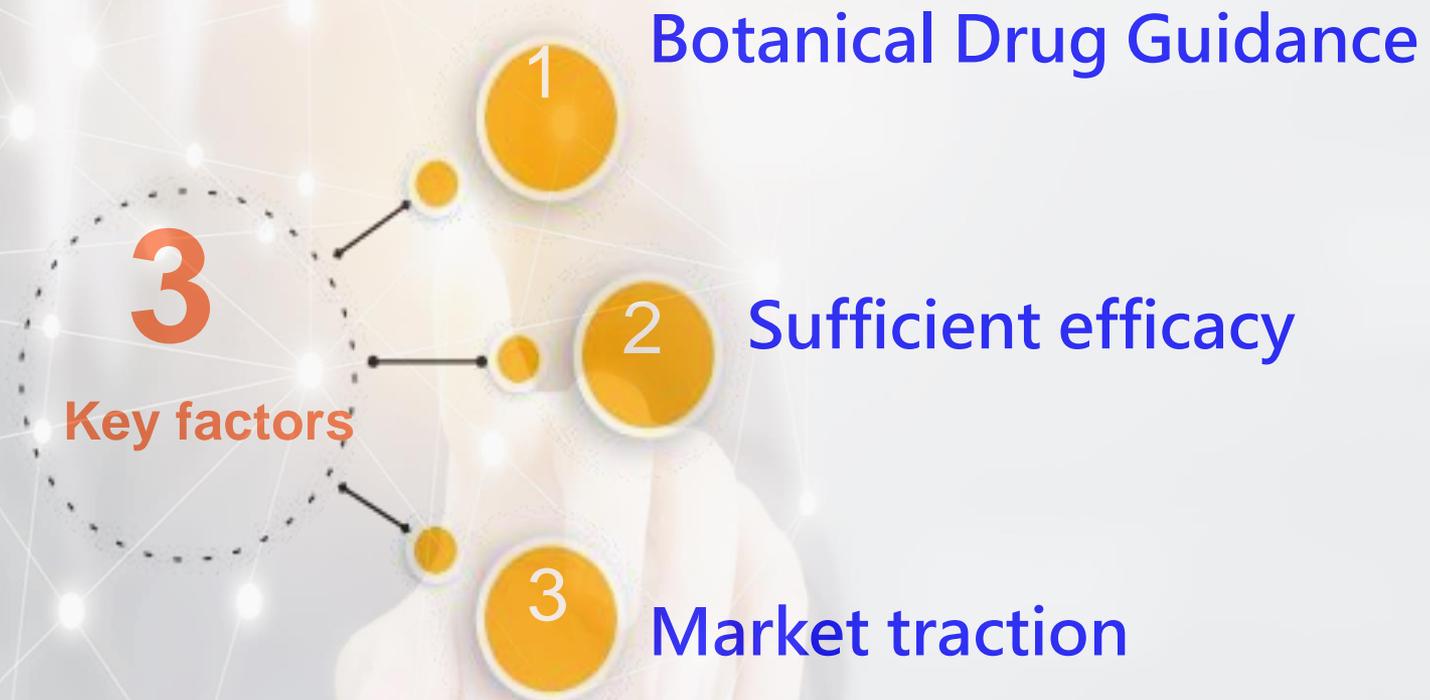
**\$50B**

USD by 2029

**4.78%**

CAGR

# Key factors holding back botanical drug markets





# Our Track Record of Success

## Regulatory Approval

**1st New TFDA License**  
For Prescription Botanical  
Drug issued by TFDA  
(April, 2010)

**1st PIC/S GMP Certified**  
Botanical Drug API Plant  
Certified by TFDA  
(September, 2016)

**2 of 9 New Drugs**  
approved by TFDA  
developed by PhytoHealth

## Evidence of Efficacy

**19 Research Articles**  
on PG2 found in top 25%  
Leading Medical &  
Cancer Journals

**323 Trial Subjects**  
in a successfully  
conducted randomized,  
double-blind, multi-  
center clinical trial

**13 Clinical Data Reports**  
presented to world-  
renowned medical  
society including ASCO,  
MASCC, WCP, and TJCC

## Market Growth

**PG2 is reimbursed by Taiwan  
National Health issuance.**  
the 1<sup>st</sup> botanical drug  
reimbursed by NHI(2021.3)

**PG2 has been adopted by**  
70 medical institutions  
18 Medical Centers  
36 Regional Hospitals

**Continuous accumulation of  
clinical experience in cancer-  
related fatigue**

380+ Oncologist  
10,000+ Patient experience  
5,000+ Continuing education  
for medical staff



# Sharing our Value Chain





# 2022-2023 Key progress



**1. Publication at the 2023 ASCO  
(American Society of Clinical Oncology)  
annual meeting**

# 2023 June ASCO -PG2® Abstract

## Breast cancer clinical trials

Period : 02.21.18~12.31.21 (On 8/31'21 All patients have completed the trial)

Execution agencies: E-Da Cancer Hospital, Linkou, Chang Gung Memorial Hospital, Taipei and Kaohsiung Chang Gung Memorial Hospital

Accepted: 67 persons Evaluable: 61 persons (61 persons)

Abstract # 537

## Effect of Astragalus Polysaccharides (PG2) Treatment of Adjuvant Chemotherapy-induced Fatigue in Premenopausal Patients with Breast Cancer

Kun-Ming Rau<sup>1</sup>, Wen-Chi Shen<sup>2,3</sup>, Shin-Cheh Chen<sup>2,3</sup>, Cheng-Hsu Wang<sup>4</sup>, Ruey-Kuen Hsieh<sup>5</sup>, Chao-Ming Hung<sup>1</sup>, Meng-Ting Peng<sup>2,3</sup>, Chien-Ting Liu<sup>6</sup>, Yueh-shih Chang<sup>4</sup>, Wen-Ling Kuo<sup>2,3</sup>, Hsu-Huan Chou<sup>2,3</sup>, Kun-Yun Yeh<sup>4</sup>, Tsung-Han Wu<sup>4</sup>, Chun-Feng Wu<sup>4</sup>, Pei-Hung Chang<sup>4</sup>, Yen-Min Huang<sup>4</sup>, Chi-Chang Yu<sup>2,3</sup>, Chun-Hui Lee<sup>4</sup>

<sup>1</sup>E-Da Cancer Hospital Kaohsiung, Taiwan; <sup>2</sup>Chang Gung Memorial Hospital, Taoyuan Branch, Taiwan; <sup>3</sup>Chang Gung Memorial Hospital, Taipei Branch, Taiwan; <sup>4</sup>Chang Gung Memorial Hospital, Lakeview Branch, Keelung, Taiwan; <sup>5</sup>MacKay Memorial Hospital, Taipei, Taiwan; <sup>6</sup>Chang Gung Memorial Hospital, Kaohsiung Branch, Kaohsiung, Taiwan

### Background

Fatigue is one of the most common symptoms of breast cancer (BC) patients who are receiving adjuvant chemotherapy. Astragalus Polysaccharides (PG2) had been proved to relieve cancer-related fatigue in advanced cancer patients. The aim of this study was to evaluate the efficacy of PG2 as a complementary treatment among stage II/III BC patients with adjuvant chemotherapy of epirubicin-cyclophosphamide (EC) regimen in reduction of chemotherapy-induced toxicity and encouraging compliance with chemotherapy.



### Methods

#### Design:

- Double-blind, randomized, placebo controlled, multi-center trial

#### Patients:

- Stage II/III BC patients who would receive adjuvant EC at least 4 cycles to either PG2 500 mg or placebo on day 1, 3, 8 every 21 days as the combination.

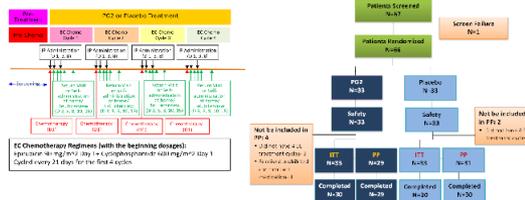
#### Measurement Tools:

- Chemotherapy-related fatigue Score (CRFS) was assessed by the validated questionnaire Brief Fatigue Inventory (BFI)-Taiwanese Form.
- Health-Related Quality of Life (HRQL) was assessed by the validated questionnaires EORTC QLQ-C30 and BR23.
- Adverse events were evaluated by CTCAE v4.03.

### Results

Figure 1. Study Flow Chart

Fig 2. Subject Disposition



### Conclusion:

- PG2 combined with adjuvant EC can significantly improve EC-induced fatigue in premenopausal BC patients.
- PG2 assists these patients with maintaining normal daily activities to care for family and manage job during chemotherapy.
- Patients treated PG2 might have better condition to complete the whole course of adjuvant chemotherapy.

QR code

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**Conclusion:** Chemotherapy combined with "cancer fatigue" drugs can prevent or slow down the fatigue of "premenopausal" women with breast cancer during chemotherapy, and have better medication compliance and quality of life.

significant difference among the Treatment groups. Of note, the menopausal status was significantly different between the groups.

menopausal status was significantly different between the groups. Of note, the menopausal status was significantly different between the groups.

The effects of PG2 were observed in the premenopausal patients for reducing chemotherapy-induced fatigue and insomnia, and negative impact on future perspective, and global health status compared with the placebo group.

Fig 3. Summary of BFI Fatigue Score Change from Cycle 1 to Cycle 4 for the ITT Pre-menopausal Population

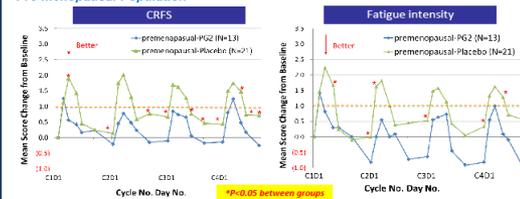


Fig 4. Summary of BFI Item 3 score, 0-10

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 5. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 6. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 7. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 8. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 9. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 10. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 11. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 12. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 13. Summary of EORTC QLQ-C30 score, 0-100

PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

Fig 14. Summary of EORTC QLQ-C30 score, 0-100

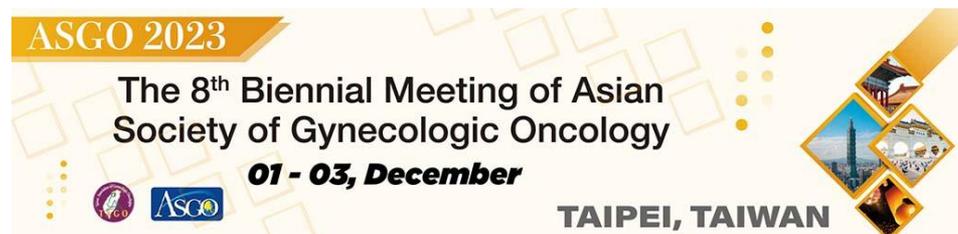
PG2 group were less aggravated after 4 cycles group. In cycle 1 day 5 (PG2: 0.6; Placebo: 1.9, P = 0.7, P = 0.002).

# 2023 PG2® Publication at Clinical Conference

## Academic publication

Item	Name of the papers	date	Journal or medical society name
1	Combination of Astragalus Polysaccharides (PG2) to reduce Persistent Cancer-related Fatigue in Gynecologic Cancer Patients under Chemotherapy	12/1/2023-12/3/2023	The 8th Biennial Meeting of Asian Society of Gynecologic Oncology (ASGO 2023)
2	Identifying the characteristics of cancer-related fatigue in gynecological cancer patients and seeking effective models for fatigue-related treatment	05/06/2023	The 27th Taiwan Joint Cancer Academic Annual Conference (2023/5/6)
3	Effect of Astragalus Polysaccharides (PG2) Treatment of Adjuvant Chemotherapy-induced Fatigue in Premenopausal Patients with Breast Cancer.	06/04/2023	2023 ASCO Annual Meeting

2023 ASCO®  
ANNUAL MEETING





## **2. Strengthen clinical decision making in Cancer-Related Fatigue**

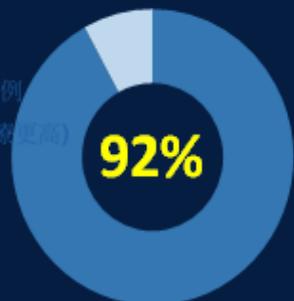
# 92% of patients have cancer-related fatigue

## 92% 台灣癌症患者罹癌期間有疲憊問題

- 第一次全台灣癌症病患「癌因性疲憊症」流行病學調查研究

- 期間為2015年2月至5月
- 共23家醫院進行研究
- 共1,207病患參與調查
- 問卷

癌因性疲憊(BFI-T, ICD-10)  
生活品質量表(FACT-G7)  
癌症症狀困擾嚴重度量表

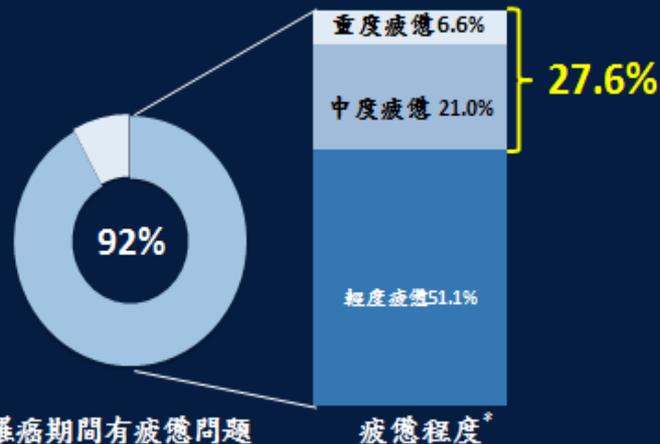


罹癌期間有疲憊問題

2015 Palliative Care in Oncology Symposium, Boston; Oct 9-10, 2015, Abstract # 155471, 2016 MASCC Poster # MASCC-0488.

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## 大於1/4 癌症病患有中重度疲憊



罹癌期間有疲憊問題

疲憊程度\*

\* The three groups were calculated from the average of nine items from BFI and categorize into mild (<4), moderate (4-6.99), Severe (≥ 7).

2015 Palliative Care in Oncology Symposium, Boston; Oct 9-10, 2015, Abstract # 155471, 2016 MASCC Poster # MASCC-0488.

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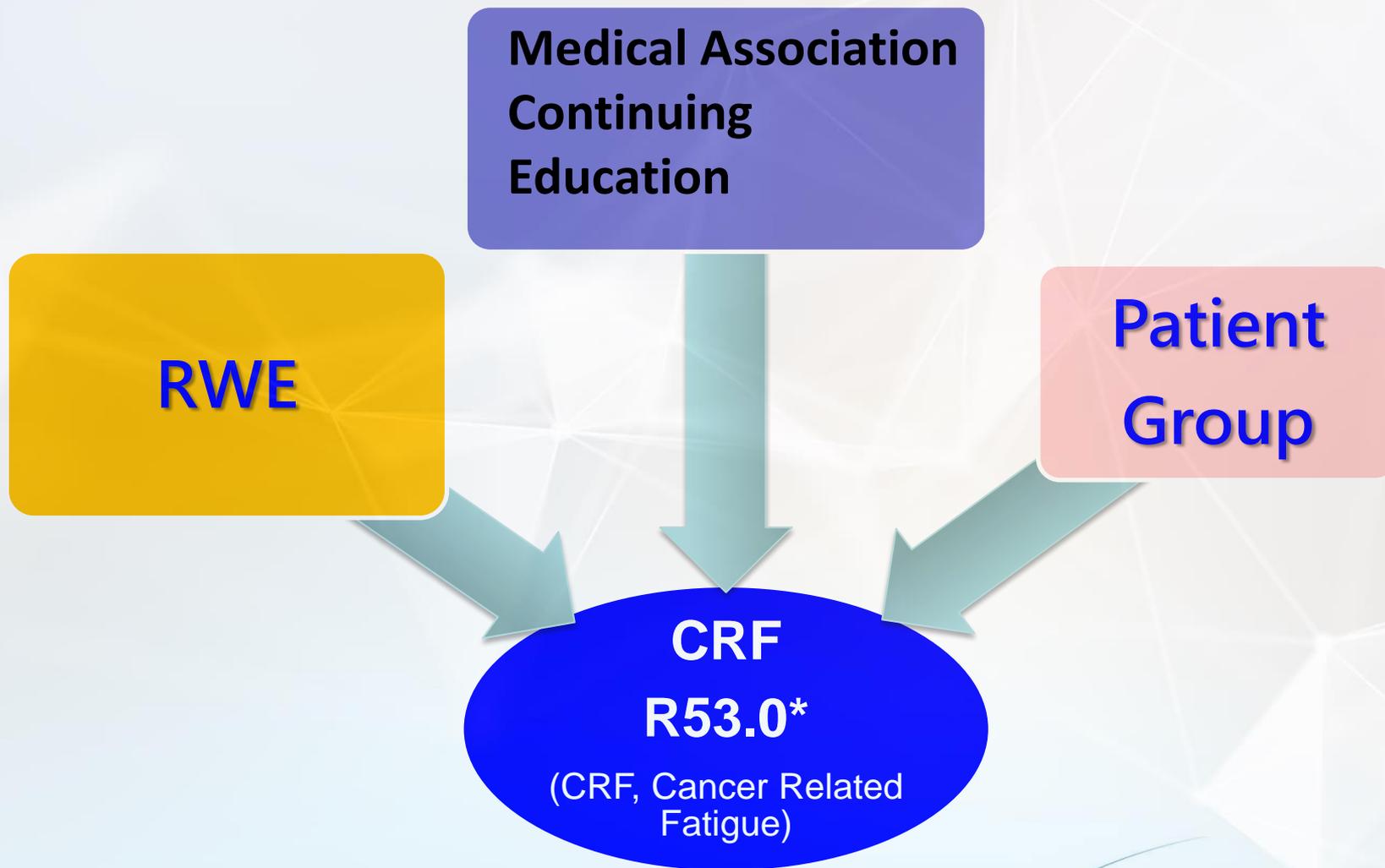
According to the "Guidelines of Management of Cancer related Fatigue<sup>1</sup>"  
**Astragals polysaccharide injection (PG2<sup>®</sup>)** is recommended to treat moderate to severe cancer related fatigue (Level 1A, Grade A Recommendation)

1. Management of Cancer Related Fatigue in Taiwan-An Evidence Based Consensus of screening, assessment and treatment: Japanese Journal of Clinical Oncology (JJCO 2022 Volume 53, Issue 1, January 2023). 2023. 11 台灣癌症安寧緩和醫學會 發表更新



懷特生技新藥(股)公司  
PhytoHealth Corporation

# Strengthen decision-making for CRF



A hand pointing upwards with a glowing network overlay. The background is a light blue gradient with a network of white dots and lines. A hand is visible, pointing upwards with the index finger. The hand is illuminated with a warm, golden glow. The network overlay consists of white dots connected by thin white lines, creating a grid-like pattern. The overall image has a futuristic and technological feel.

## 3. Launch Oraphine<sup>®</sup> Globally

# Oraphine® 60mg@soft Capsule : a new treatment choice to treat moderate to severe pain

Oraphine® (nalbuphine HCl 60mg Soft Capsules)  
懷特痛寶® 軟膠囊  
Easy way to end pain now

Relieving Pain  
Brightening Lives

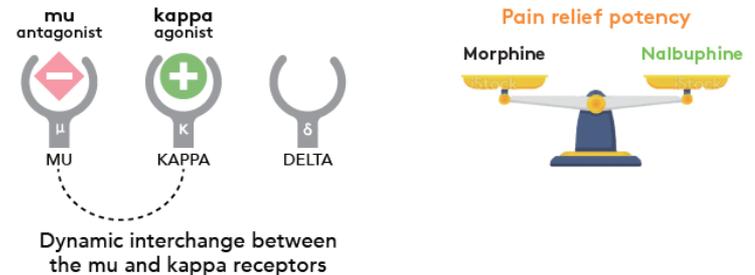
Relieve moderate to severe acute pain

PhytoHealth

**Oraphine® is the first choice of oral analgesia for moderate to severe pain because it provides rapid onset, powerful efficacy and better safety profile.**

## Unique mechanism of action<sup>1</sup>

- Mu-opioid receptor (MOR) antagonist and Kappa-opioid receptor agonist
- Low addiction and high safety when compared to MOR agonists
- Pain relief potency is approximately equivalent to morphine



- Now in use in major hospitals in Taiwan

A hand pointing upwards with a glowing network overlay. The background is a light blue and white gradient with a network of white lines and glowing nodes. A blue horizontal bar is at the top and bottom of the slide.

## 4. BIO Conference and Exhibition

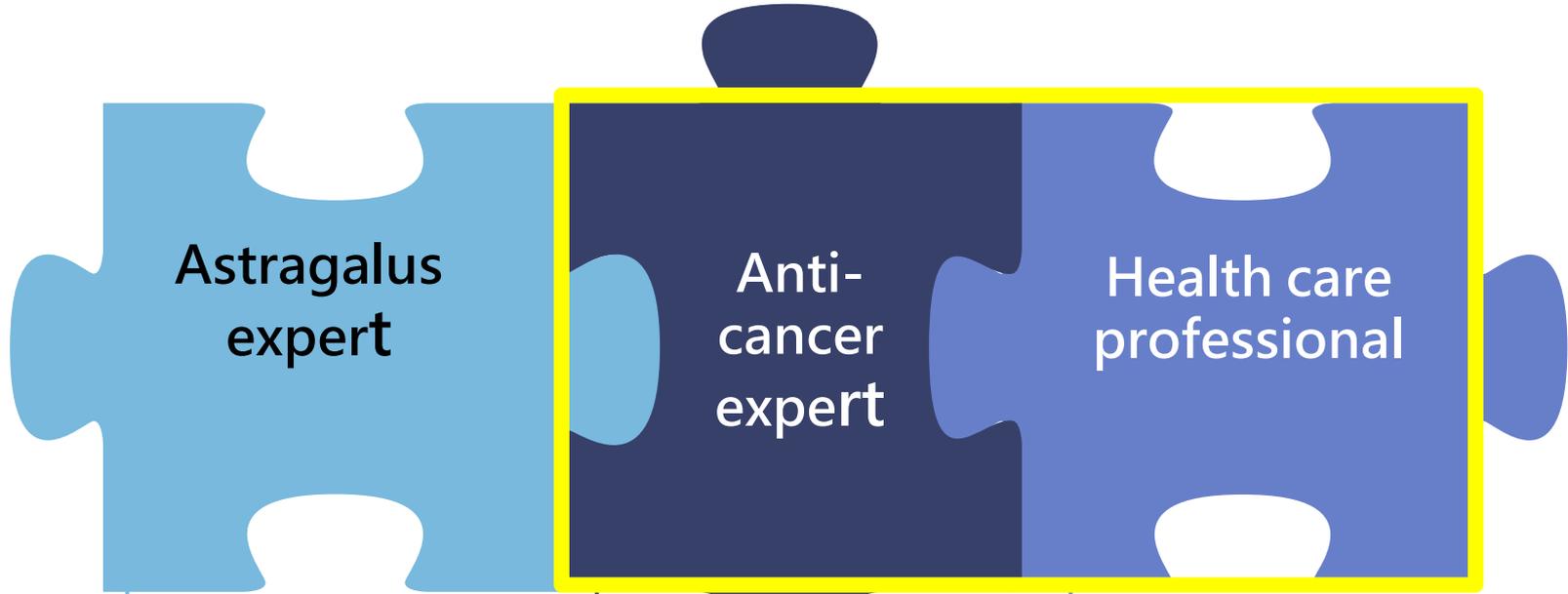
# 2023 US BIO Boston Taiwan Pavilion: Phytohealth



A hand pointing upwards with a glowing network overlay. The background is a light blue and white gradient with a network of white dots and lines. A hand is visible, pointing upwards with the index finger. The text "5. Nutritional supplements" is overlaid in blue.

## 5. Nutritional supplements

# Phytohealth entered nutritional supplement market with the spirit of new drug research and development



## Technology

World Leading technology of refined astragalus polysaccharide

## Requirements

Focus first on highly professional post-disease health care products ex: cancer

## Brand

Phytohealth—an botanical drug expert aiming to provide good products to serve unmet needs



# Financial information



懷特生技新藥(股)公司  
PhytoHealth Corporation

# 「 Balance Sheet 」

Sound financial structure  
 1. Sufficient cash  
 2. Low debts ratio

單位:仟元

科 目	112.9.30	%	111.12.31	%
CURRENT ASSETS	1,521,568	65	1,568,464	66
NON-CURRENT	824,139	35	796,164	34
TOTAL ASSETS	2,345,707	100	2,364,628	100
CURRENT LIABILITIES	52,644	2	62,118	3
NON-CURRENT	25,117	1	25,057	1
TOTAL LIABILITIES	77,761	3	87,175	4
Share capital - ordinary	1,986,189	85	1,986,189	84
Capital surplus and Others	(65,083)	(3)	(78,257)	(4)
Equity-Parent Company	1,921,106	82	1,907,932	80
Minority	346,840	15	369,521	16
Total Equity	2,267,946	97	2,277,453	96
TOTAL LIABILITIES AND EQUITY	2,345,707	100	2,364,628	100

# 「Income statement」

1. Net sales grew 14%  
2. Net loss reduced 65%

單位:仟元

Account	112 1-9		111 1-9月		+-%
	(A)	%	(B)	%	(A-B)/B
Net Sales	115,885	100	101,651	100	14
Gross Margin	48,274	42	42,790	42	13
Operating Exp.	(127,702)	(110)	(144,372)	(191)	(12)
Operating Loss	(79,428)	(68)	(101,522)	(149)	(22)
Non-operating gain/loss	40,481	35	36,446	10	11
Net loss before income tax	(38,947)	(33)	(65,076)	(139)	(40)
Net loss-consolidated	(38,947)	(33)	(65,076)	(139)	(40)
Net loss-Parent	(15,200)	(13)	(42,937)	(102)	(65)
EPS	(0.08)		(0.22)		

The background is a vibrant blue gradient with a futuristic, high-tech aesthetic. On the left, a globe is depicted with a grid overlay, and a circular logo containing a stylized 'R' is positioned above it. A bright, glowing beam of light originates from the logo and extends towards the right. In the bottom right corner, a blue and white capsule with a logo is visible. The overall scene is framed by a large, curved, multi-colored arc that transitions from blue to yellow and orange.

**Thank You !**