


Inside NCIS

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 National University
Cancer Institute
Singapore

NCIS LEADERS' FORUM 2024:

Charting Our Way Forward

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INCREDIBLE CARE

Charting Our Way Forward

37 of our leaders came together for the NCIS Leaders' Forum on 25 Oct 2024 to map out the next steps in achieving our 2030 Cancer Plan.

Using the SWOT (Strengths, Weaknesses, Opportunities & Threats) analysis model, they brainstormed their ideas to tackle various issues around **six key areas** concerning the future of cancer care & our workforce.

1. Population Health

- Eg: How can we adapt to both local cancer trends and global advances in care and research?

2. Collaborative Networks

- Eg: How can we leverage partnerships to share knowledge, research, and resources effectively?

3. Workforce Development

- Eg: How can we prepare a future-ready workforce in light of expected retirements, changing skill sets, and staff shortages?

4. Technology & AI Integration

- Eg: How can we ensure we leverage AI responsibly, while addressing misinformation?

5. Agility & Innovation

- Eg: How can we foster an environment of ongoing innovation and improvement?

6. Constraints & Threats

- Eg: How can we account for the impact of demographic changes, increasing demands for cancer services and workforce shortage?



Dr Melissa Ooi shares her team's ideas on how to prepare for a future-ready workforce.



After identifying the common themes that emerged for each key area, our leaders ranked the top 10 priorities for NCIS and discussed how to achieve them.

The action plans will guide our future strategies to become a world-class, cutting-edge cancer centre by 2030.

A big thank you to our participants for their invaluable insights and contributions during this year's Leaders' Forum!



It's amazing to see how the leaders of NCIS came together to brainstorm and identify focus areas to bring NCIS to the next level as we continue to provide holistic care for our patients.

Dr Yee Choon Meng
Head, Division of Palliative Care



Photo Source: CNA

INCREDIBLE CARE

Giving Patients a Second Shot at Life

A team of researchers & clinicians, led by Prof Allen Yeoh (pictured, right) has developed a new cell therapy for T-ALL cancer patients who have exhausted all forms of treatment.

The treatment, which has been published in the Nature Medicine medical journal, reprograms a patient's T-cells to target and destroy the cancer cells.

16 patients who underwent this experimental treatment went into complete remission within a month. The first patient has now been in remission for five years without the need for additional chemotherapy or a bone marrow transplant.

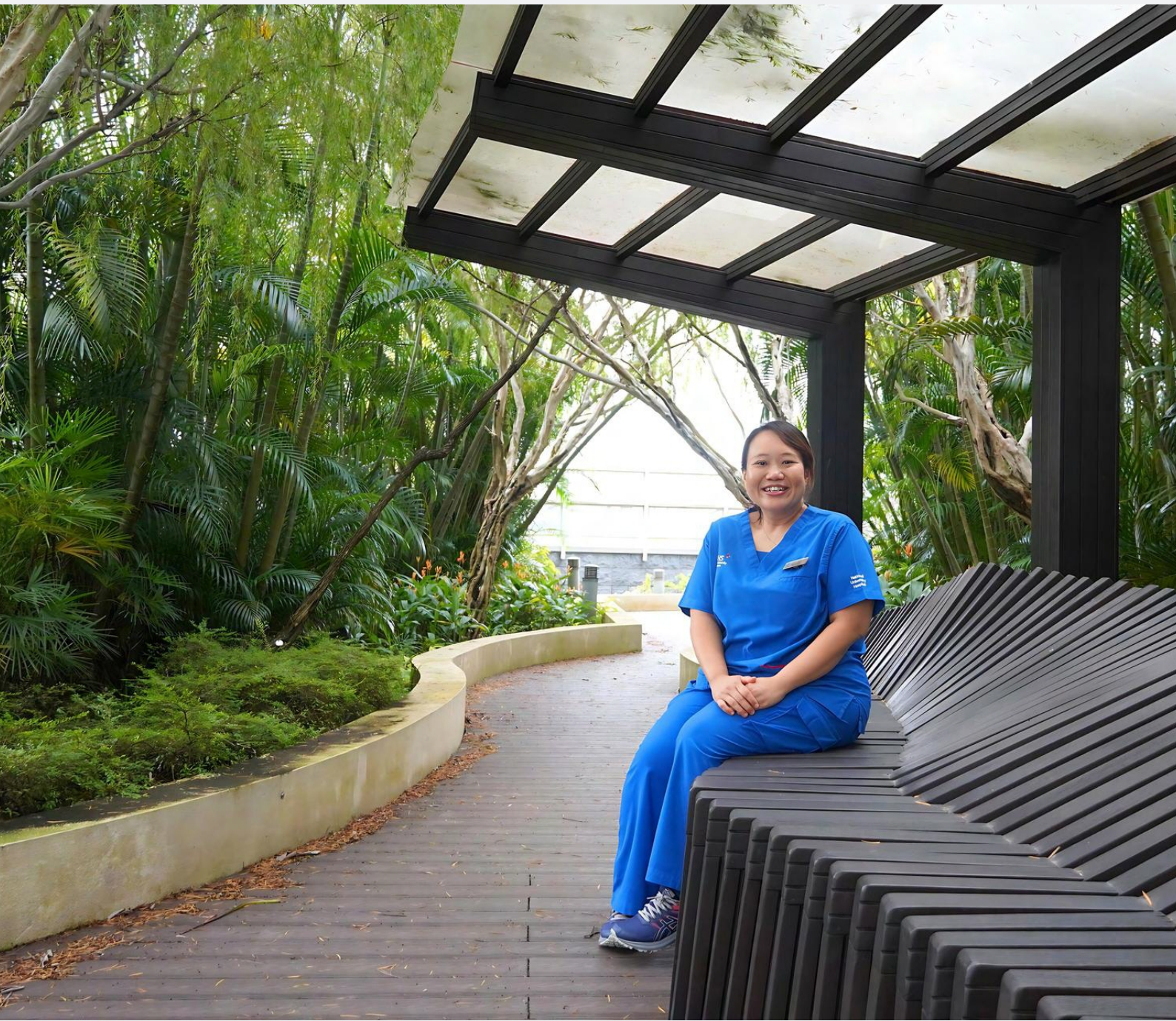
Click [here](#) to find out how he was given a second shot at life.

INCREDIBLE PEOPLE

Making a Difference Beyond the Workplace

ANC Lee Foong Gwan was one of 11 individual winners from NUHS who received the Healthcare Humanity Award in Oct 2024. The Award recognises inspirational role models who have gone the extra mile to offer care and comfort to those in need.

Read on to find out how Foong Gwan has done so through volunteering.



Tucked quietly in the corner of a one-room rental flat, a visually-impaired elderly man lay uncomfortably in bed. A fever had gripped him, intensifying his frailty, while his wife stood nearby paralyzed by fear and exhaustion.

In the stillness of that moment, hope seemed to fade - until an urgent call to Foong Gwan brought a glimmer of relief.

As a volunteer with Lifehouse SG - a ground-up volunteering initiative she started with her friends in 2019 - Foong Gwan often visited the couple to change their dressings, conduct medication reconciliation, and educate them on fall risks. That fateful Sunday, however, demanded more.

Foong Gwan and her friends rushed over to provide the man with immediate medical attention. They later called an ambulance for him to receive further treatment.

This is just one of many instances where Foong Gwan has made a difference to the lives of the people she serves outside NCIS.

Working closely with a Residents' Committee (RC) in the West, both she and her friends organise social activities for the elderly in the community, such as art and craft, karaoke, and excursions around Singapore. The activities help the elderly maintain their well-being and sense of purpose.

“One resident told me his most treasured memory was when we celebrated his birthday in a restaurant. This reminded me of how important it is to be present for others,” she said.

Through each selfless act of kindness, Foong Gwan demonstrates that even the smallest gestures can have a lasting impact.

And in life's most fragile moments, when fear tightens its grip and uncertainty looms, it is the presence of those like her that reminds us of what it means to truly live - to care, connect, and offer hope when it's needed most.



“

When people see the joy and care that volunteers bring to others, it often inspires me to give back in all ways I can.

INCREDIBLE PEOPLE

Ending the Year Together



It was an evening of fun & laughter as we gathered for our year-end party on 19 Dec 2024. A big thank you to our Wellness Champions for organising it!

Let's create even better memories in 2025, #teamNCIS!



CHAPTER-GIST-101: A phase I study of pimitespid combined with imatinib in patients with imatinib-refractory gastrointestinal stromal tumor

Yong Wei Peng¹, Yoichi Naito², Hidekazu Hirano³, Jian Li⁴, Yukinori Kurokawa⁵, Yoshito Komatsu⁶, Masato Ozaka⁷, Masaaki Iwatsuki⁸, Jen-Shi Chen⁹, Chueh-Chuan Yen¹⁰, John Raymond Zalcberg¹¹, Amtesh Chandra Roy¹², Li-Tzong Chen¹³, Ye Zhou¹⁴, Toshiro Nishida¹⁵, Toshihiko Doi¹⁶

CAN THE COMBINATION OF PIMITESPID (HSP90 INHIBITOR) AND IMATINIB OVERCOME RESISTANCE IN GIST PATIENTS WHO ARE REFRACTORY TO IMATINIB?

1st-L Imatinib¹ mPFS: 20.4 months ORR: 51% **2nd-L Sunitinib²** mPFS: 5.5 months ORR: 7%

HSP90 inhibitor + TKI
Pimitespid + Imatinib

Overcoming resistance to imatinib This combination may allow patients to continue imatinib (IM)-based treatment and preserve the second-line sunitinib (SU) treatment for later use.

Expanding 2nd line treatment options This combination has a different safety profile to SU and could be another option for 2nd line treatment.

BACKGROUND

Client proteins (KIT, PDGFRA, etc.) are properly folded by HSP90. Imatinib inhibits the ATP binding site of these proteins, leading to induced degradation. Pimitespid (PIMI) is a novel HSP90 inhibitor approved in Japan for patients with 4th-line gastrointestinal stromal tumor (GIST) based on the results of the phase 3 study (CHAPTER-GIST-301).^{1,2} PIMI effectively inhibited tumor growth in an IM-resistant xenograft model.³ Its activity was further enhanced when combined with TKIs,³ including IM.¹²

RESULTS OF THE DOSE ESCALATION PART

• Preliminary efficacy and tolerability were also observed in IM-resistant pts in a dose escalation part of the CHAPTER-GIST-101 study (NCT05245968), as presented at ESMO 2023 (1917MO).⁴
 • Once-daily dose of 120 mg (iv: 1) or 160 mg (iv: 2) PIMI was administered orally on a 5-day on/2-day off schedule, and 400 mg of IM was administered once daily on a standard 3+3 dose escalation.

Safety

Grade	IM 400mg QD	PIMI 120mg QD + IM 400mg QD	PIMI 160mg QD + IM 400mg QD
Any grade	100%	100%	100%
Grade 1-2	95%	95%	95%
Grade 3-4	5%	5%	5%

Efficacy

Parameter	IM 400mg QD	PIMI 120mg QD + IM 400mg QD	PIMI 160mg QD + IM 400mg QD
mPFS (months)	5.5	12.9	12.9
ORR (%)	7	51	51

FORMULATION for the expansion part

Confirmed, IM refractory GIST on 2nd treatment other than IM at or after IM based on RECIST 1.1

Recruiting

Combination (N = 20)
PIMI 120 mg/day + IM 400mg/day
5 days on/2 days off

Monotherapy (N = 20)
PIMI 160 mg/day + IM 400mg/day
5 days on/2 days off

Standard therapy (N = 20)
SU 50 mg/day
4 weeks on/2 weeks off

STUDY SITES

Presenter Information
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COI: Amgen, Astra Zeneca, BMS, DKSH, Eisai, Ipsen Merck, MSD

INCREDIBLE RESEARCH

ESMO Asia 2024

Held at Suntec City Convention Centre, Singapore from 6-8 Dec 2024, ESMO Asia Congress brought together more than 4000 oncologists, researchers, healthcare professionals, and industry representatives from across Asia to collaborate and exchange knowledge on topics related to oncology.

Our colleagues from the Department of Haem-Onco were among those selected for poster presentations and speaking engagements at the congress. This highlights their exceptional contributions to the field, and we congratulate them for representing NCIS at such a prestigious event!

Poster Presentations:

- **Prof Lee Soo Chin, Senior Consultant**
 - *Real-world treatment patterns and survival outcomes in patients (pts) with HER2+ unresectable (u) or metastatic breast cancer*
 - *(mBC): HER2 REAL Asia cohort Clinical characteristics of patients (pts) with HER2+ unresectable (u) or metastatic (m) breast cancer (BC): HER2 REAL Asia cohort*
- **Dr Wei Peng Yong, Senior Consultant**
 - *CHAPTER-GIST-101: A phase I study of pimitespib combined with imatinib in patients with imatinib-refractory gastrointestinal stromal tumor*
- **Dr Huang Yiqing, Consultant**
 - *Hierarchical Clustering of Immune Checkpoint Inhibitor-Related Pneumonitis in an Asian Cohort of Patients*
- **Dr Wang Meng, Resident** (Pictured, right)
 - *Real-World Evidence on Total Neoadjuvant Therapy (TNT) vs. Neoadjuvant Concurrent chemoradiation (NA CCRT) for Locally Advanced Rectal Cancer (LARC) from a Tertiary Asian Cancer Centre*
- **Carol Ho, Advanced Practice Nurse**
 - *An Advanced Practice Nurse-Led Teleconsultation Service for Rectal Cancer Patients Undergoing Concurrent Chemoradiation*



Speaking Engagements

- **Adj A/Prof Michelle Poon, Senior Consultant**
 - **Education Session**
 - *Bispecific Antibodies Session Co-Chair and Speaker)*
 - *Bispecific antibodies in frontline treatment*

- **Prof Lee Soo Chin, Senior Consultant**
 - **Industry Satellite Symposium**
 - *Cyclin' through Innovation: Next Generation CDKs In HR + MBC (Session Chair and Speaker)*
 - *Challenges in Frontline Treatment of HR + MBC*

 - **ESMO 2024 Highlights Session 2**
 - *Invited Discussant on Asian Perspectives*

- **A/Prof David Tan, Senior Consultant**
 - **Education Session**
 - *New Frontiers in the Treatment of Gynaecological Malignancies*
 - *How to treat endometrial cancer according to molecular subtypes with and after immunotherapy*

 - **Industry Satellite Symposiums**
 - *Evolving Treatment Landscape for Patients with Endometrial Cancer (Session Co-Chair)*
 - *HER2+ Advanced Solid Tumours: A Fireside Chat on Harnessing Molecular Profiling to Improve Patient Outcomes (Faculty)*

 - **Proffered Paper Session: Gynaecological Cancers**
 - *Invited Discussant*

- **Dr Ross Soo, Senior Consultant**
 - **Industry Satellite Symposiums**
 - *The Emerging Role of C-MET Protein Directed Antibody-Drug Conjugates (ADCs) (Speaker)*
 - *Targeting c-MET in Advanced Non-Small Cell Lung Cancer with ADCs*
 - *Pioneering Advances in EGFRm NSCLC Therapy: Navigating the Future of Patient Care CARE (Session Chair and Speaker)*
 - *Overview of Unmet Needs of EGFRm Advanced NSCLC in Asia*

INCREDIBLE RESEARCH

High-Impact Research Publications

Well done to our clinicians who achieved a Journal Impact Factor (JIF) of 10 and above for their research publications this year!

Targeting ATR in patients with Cancer

by Natalie Ngoi

Nature Reviews Clinical Oncology, Feb 2024 (JIF: 78.8)

Stroke Risk in Survivors of Head and Neck Cancer

by Jessie Yip Pui Lam, Timothy Cheo, Tan Teng Hwee, Lee Shing Fung, Leong Yiat Horng, Wong Lea Choung, Jeremy Tey, Francis Ho Cho Hao, Soon Yu Yang

JAMA Network Open, Feb 2024 (JIF: 13.8)

Multinational Association of Supportive Care in Cancer (MASCC) clinical practice guidance for the prevention of breast cancer-related arm lymphoedema (BCRAL): international Delphi consensus-based recommendation

by Lee Shing Fung

eClinicalMedicine, Feb 2024 (JIF: 15.1)

Circular RNA as a Source of Neoantigens for Cancer Vaccines

by Lieske B, Tan KK

Journal for Immunotherapy of Cancer, Mar 2024 (JIF: 10.9)

Aberrant non-canonical NF- κ B signalling reprograms the epigenome landscape to drive oncogenic transcriptomes in multiple myeloma

by Wee Joo Chng

Nature Communications, Mar 2024 (JIF: 16.6)

Oral Iptacopan Monotherapy in Paroxysmal Nocturnal Hemoglobinuria

by Yap Eng Soo

NEJM, Mar 2024 (JIF: 96.2)

A multimodal atlas of hepatocellular carcinoma reveals convergent evolutionary paths and 'bad apple' effect on clinical trajectory

by Bonney GK

Journal of Hepatology, May 2024 (JIF: 25.7)

EAquired Multidrug Resistance in AML Is Caused by Low Apoptotic Priming in Relapsed Myeloblasts

by Wee Joo Chng

Blood Cancer Discovery, May 2024 (JIF: 11.7)

A Pre-Leukemic DNA Methylation Signature in Healthy Individuals at Higher Risk for Developing Myeloid Malignancy

by Wee Joo Chng

Clinical Cancer Research, May 2024 (JIF: 11.5)

Consensus guidelines and recommendations for the management and response assessment of chimeric antigen receptor T-cell therapy in clinical practice for relapsed and refractory multiple myeloma: a report from the International Myeloma Working Group Immunotherapy Committee

by Wee Joo Chng

The Lancet Oncology, May 2024 (JIF: 51.1)

International Myeloma Working Group immunotherapy committee consensus guidelines and recommendations for optimal use of T-cell-engaging bispecific antibodies in multiple myeloma

by Wee Joo Chng

The Lancet Oncology, May 2024 (JIF: 51.1)

Inconsistencies in the predictive value of PD-L1 in metastatic gastroesophageal cancer

by Raghav Sundar

Lancet Gastroenterol Hepatol, Jun 2024 (JIF: 35.7)

Epigenetic dysregulation of eukaryotic initiation factor 3 subunit E (eIF3E) by lysine methyltransferase REI1BP confers a pro-inflammatory phenotype in t(4;14) myeloma

by Wee Joo Chng

Haematologica, Jun 2024 (JIF: 10.1)

Effectiveness and safety of continuous low-molecular-weight heparin versus switching to direct oral anticoagulants in cancer-associated venous thrombosis

by Lee Shing Fung

Nature Communications, July 2024 (JIF: 14.7)

Spatially Resolved Niche and Tumor Microenvironmental Alterations in Gastric Cancer Peritoneal Metastases

by So JBY, Shabbir A Chia DKA, Jia Hao Law, Kim G

Gastroenterology, Aug 2024 (JIF: 29.4)

Perioperative management of sarcopenia in patients undergoing major surgeries in Singapore: a modified Delphi consensus

by Kow Wei Chieh

International journal of surgery (London, England), Aug 2024 (JIF: 15.3)

Increasing Colorectal Screening Uptake in Spouses of Patients With Colorectal Cancer Using a Randomized Behavioral Trial

by Tan Ker Kan, Lieske Bettina

Journal of the National Comprehensive Cancer Network, Aug 2024 (JIF: 13.4)

Super enhancer acquisition drives expression of oncogenic PPP1R15B that regulates protein homeostasis in multiple myeloma

by Chng Wee Joo

Nature Communications, Aug 2024 (JIF: 14.7)

Randomised controlled trials on radiation dose fractionation in breast cancer: systematic review and meta-analysis with emphasis on side effects and cosmesis

by Lee Shing Fung

BMJ, Sep 2024 (JIF: 93.7)

Lu-177 PSMA vs Comparator Treatments and Survival in Metastatic Castration-Resistant Prostate Cancer

by Soon Yu Yang

JAMA Network Open, Sep 2024 (JIF: 10.5)

Fatricide-resistant CD7-CAR T cells in T-ALL

by Bernice Oh, Esther Chan, Michelle Poon, Tan Lip Kun, Allen Yeoh

Nature Medicine, Sep 2024 (JIF 58.7)

A multimodal atlas of hepatocellular carcinoma reveals convergent evolutionary paths and ‘bad apple’ effect on clinical trajectory

by Glenn Bonney

IJournal of Hepatology, Oct 2024 (JIF: 25.7)

Global, regional, and national burden of stroke and its risk factors, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021

by Tan Ker Kan

The Lancet Neurology, Oct 2024 (JIF: 48)

IQGAP3 signalling mediates intratumoral functional heterogeneity to enhance malignant growth

by So Bok Yan, Jimmy

Gut, Oct 2024 (JIF: 24.5)

Prevalence of Chronic liver disease in Cholangiocarcinoma: a Meta-Analysis

by Kow Wei Chieh

Clinical Gastroenterology and Hepatology, Oct 2024 (JIF: 12.6)

Global Prevalence, Clinical Characteristics, Surveillance, Treatment Allocation, and Outcomes of Alcohol-Associated Hepatocellular Carcinoma

by Kow Wei Chieh

Clinical Gastroenterology and Hepatology, Dec 2024 (JIF: 12.6)

Thank You for Reading!

Let us know what you think of this issue by sharing your feedback [here](#).