

Inside NCIS

MARCH 2025

 National University
Cancer Institute
Singapore



NUH GOT TALENT COMPETITION:

From Front Counter to Front Stage

Table of Contents

03

Incredible Care

REDUCING CHEMO WAIT TIMES

06

Incredible Care

**MAKING RT APPOINTMENTS
CLEARER ON THE NUHS APP**

08

Incredible People

**FROM FRONT COUNTER
TO FRONT STAGE**

10

Incredible People

PANTRY POWER-UP

13

Incredible Research

**BLOCKING SPECIFIC PROTEIN
BOOSTS LUNG CANCER
TREATMENT**

14

Incredible Research

**HIGH-IMPACT
RESEARCH PUBLICATIONS**



INCREDIBLE CARE

Reducing Chemo Wait Times

New initiatives introduced in 2020 have shortened chemotherapy wait times for our patients in NCIS. Read on to find out more about them, their impact and how we continue to enhance efficiency, reduce delays, and improve the overall chemo experience.

Long wait times for chemotherapy can add unnecessary stress to cancer patients, but new initiatives introduced since May 2020 have ensured faster, more efficient treatment at the National University Cancer Institute, Singapore (NCIS).

Previously, 60% of our patients experienced delays of over an hour beyond their scheduled appointment time before starting treatment. Chemotherapy involves multiple steps, including doctor consultations, lab tests, prescription approvals and drug preparation. Delays at any stage can lead to prolonged wait times and frustration.

To optimise the process, a multidisciplinary team comprising clinicians, nurses, pharmacists and operations staff introduced several key measures such as:

Increasing Pre-Makes for Eligible Chemo Regimens:

The percentage of chemo prepared in advance (pre-makes), especially for morning appointments, were increased to reduce patient wait times for on-demand drug preparation. This allows treatment to start close to the appointment time.

Optimized Scheduling:

Administrative staff took over scheduling from nurses, freeing up nursing manpower. A new system was also put in place to prioritize pre-made chemotherapy for morning slots, while long infusions are arranged to start earlier so that they

finish within clinic operating hours.

Process Redesign

Blood tests and physician consults are scheduled at least a day before chemotherapy. Doctors are reminded to finalize orders by 3pm the day before treatment, giving pharmacists ample time for verification.

These initiatives were found to have led to:

- A reduction in median wait times from 83 to 45 minutes for morning appointments.
- A decrease in overall daily wait times from 77 to 47 minutes.
- An increase in patients beginning treatment within an hour of their appointment from 32.8% to 62.3%.
- A decrease in patients finishing treatment after 6pm from 20.3% to 9.8%.

Staff have also benefited from the new initiatives. With fewer bottlenecks and backlogs, Senior Staff Nurse Nurasyikin Binte Mohamed Ishak noted that the likelihood of staying past working hours due to patient load is lower now.

Sustaining Efforts for Further Success

To further improve efficiency, the right-siting team in NCIS has implemented more measures to prevent delays that could extend patient wait times.

Among them is a missing orders check by the Operations team.

Done daily, a report is generated and analyzed two days before the appointments (i.e D-2 Missing Orders Check) to detect any errors in chemo orders. The report is then reviewed again a day later (D-1 Missing Orders Check), and reminders are actively sent out to clinicians to rectify identified errors before treatment day.

Errors in chemo orders can delay treatment, as nurses and pharmacists must wait for a doctor's signature to rectify them.

The Advance Planning Team (APT), a team within Right-Siting tasked to enhance the chemotherapy process, is also trialling a phone triage system to allow nurses to assess a patient's condition for chemotherapy a day before their appointment.

If a patient is unwell or clinically unfit for treatment, their chemotherapy can be rescheduled in advance. This proactive approach helps reduce same-day cancellations and optimizes chair utilization, ensuring a smoother and more efficient chemotherapy scheduling process.

Feedback from patients have been

encouraging. A high proportion of those surveyed indicated their preference for a health assessment over the phone, citing shorter wait times for their chemotherapy sessions as a key benefit.

Through continuous improvement and collaboration, NCIS is setting new standards in chemotherapy delivery. By leveraging technology, data-driven decision-making and patient insights, the organisation will continue to ensure that every patient receives timely, incredible care.





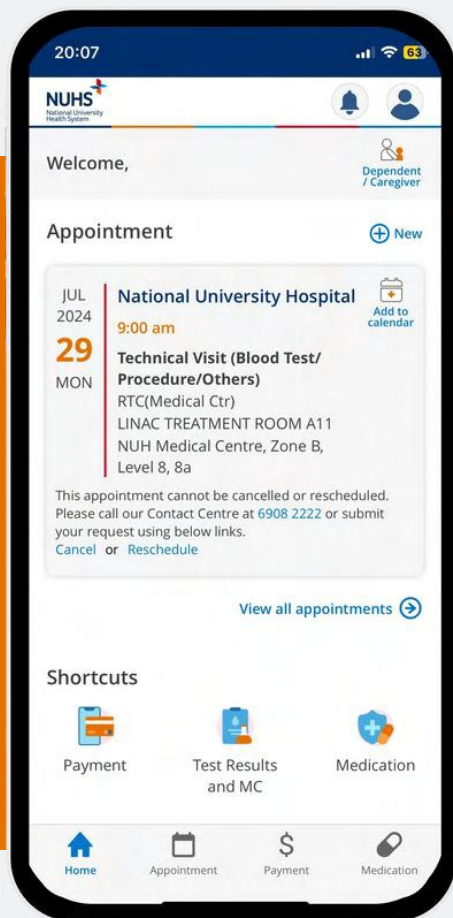
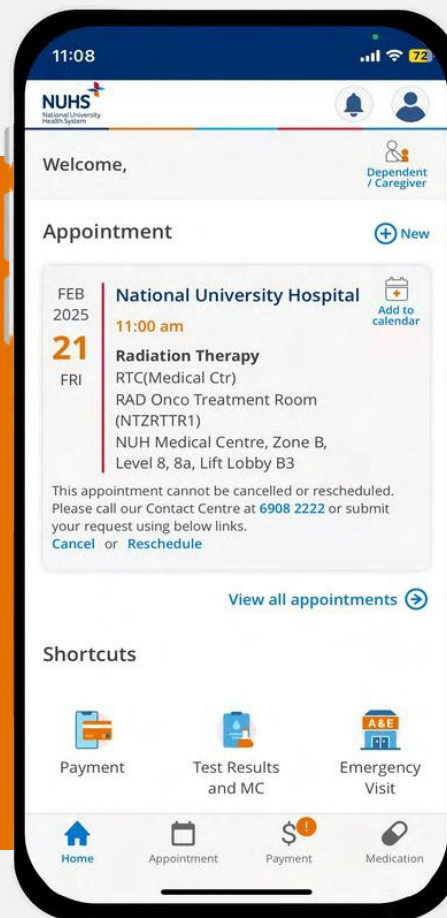
INCREDIBLE CARE

Making RT Appointments Clearer on the NUHS App

Patients undergoing Radiation Therapy (RT) will now receive clearer appointment details on the NUHS app, ensuring they are well-informed about their upcoming treatment sessions.

This improvement came about after staff feedback revealed that some patients were confused about the purpose of their appointments on the NUHS app.

Previously, RT appointments were categorized under *Blood Test/Procedure/Others*, leading some patients to mistakenly believe they needed a blood test when none was required.

Before**After**

From confusion to clarity - RT appointments are now clearly marked as Radiation Therapy in the NUHS app, thanks to the teamwork between our RT Ops team and colleagues from the Group Medical Informatics Office (GMIO).

To address this issue, the RT Operations team collaborated with the Group Medical Informatics Office (GMIO) to introduce a dedicated appointment category for RT.

Now, patients will see *Radiation Therapy* clearly indicated in the app, reducing confusion and improving the overall patient experience.

This change reflects NCIS' ongoing commitment to enhancing patient-centered care. Small but meaningful improvements like this contribute to a smoother healthcare experience for our patients to focus on their recovery with confidence.

Chemotherapy Centre ⁰⁷

心 Pusat Kemoterapi கீமோதெரபி சிகிச்சை ந



INCREDIBLE PEOPLE

From Front Counter to Front Stage

Maisarah Dhaniyah came in third at *NUH Got Talent*, wowing both the judges and audience with her powerhouse vocals. We spoke with her to find out more about her journey in the talent competition and her passion for singing.

Joining NUH Got Talent marked a defining chapter for Senior Patient Service Associate Maisarah Dhaniyah.

Despite performing for more than 10 years, this was her first-ever solo competition.

The experience was both thrilling and nerve-racking, but it also taught her valuable lessons about herself. "I learned that I'm a normal human being after all," she reflects. "Even as a performer and singer, I still make mistakes. There's always more to improve in my craft, and this journey reinforced that belief."

Maisarah's passion for singing started when she was young. Back then, her father, a drummer for an underground local band, would invite her to perform during their jamming sessions.

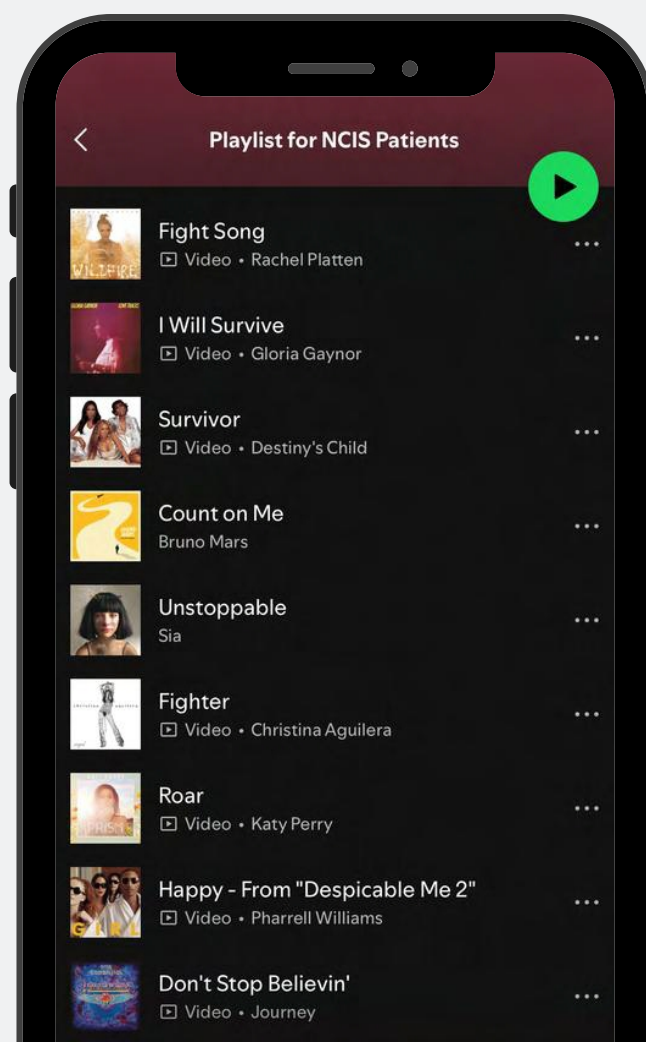
Balancing her full-time job, NUH Got Talent and another contest on Suria required immense focus. At one point, she even lost her voice from overuse, relying on remedies like Nin Jiom Pei Pa Kao to keep going. She also had to prioritize rest over time with family and friends.

Despite the challenges, Maisarah found strength in the support of her colleagues. "They've been so encouraging, and many of them made time to watch me perform in all three rounds," she shares. "It means a lot that they supported and voted for me."

Reflecting on her five years with NCIS, Maisarah is grateful for the meaningful connections she's built with patients. "Some patients remember me and always come to speak with me," she says. "I love interacting with them on a deeper level because it truly makes a difference in their experience here."

For Maisarah, her work at NCIS and passion for singing flow together like two harmonizing melodies, each offering a unique way to connect and enrich the lives of those around her.

As part of the interview, Maisarah was asked to curate a playlist for our patients at NCIS. Here are the songs she selected:





INCREDIBLE PEOPLE

Pantry Power-Up

The Level 9 Cancer Centre Ensure Safer Systems (ESS) team won the NCIS Heavyweight Champions Challenge for their pantry revamp project. Find out more about how they transformed the pantry into a welcoming space for staff to enjoy.

Why did the team choose the pantry to clean?

The pantry on Level 9 is a shared space accessible to all staff. During our environmental audit, we discovered a significant amount of expired food, unwanted mugs, plates, and even rotten utensils, which made the pantry look cluttered and unhygienic.

Since no one had taken ownership of maintaining the space, it had become messy and unorganized. We gathered feedback from various departments - including Housekeeping, Pharmacy, Nursing, Service Assistants, and Porters - to encourage shared responsibility.

Each department selected a designated cupboard space to maintain, fostering a sense of ownership and accountability.

Did any unexpected challenges arise, and how did you overcome them?

One major challenge was the cost of color-coding the pantry, as the artwork alone was estimated to cost \$500. Fortunately, our internal designer, APN Carol, stepped in to help with the design (below). Thanks to her creativity and effort, we were able to transform the pantry beautifully without incurring high expenses.



The cupboard labels were designed by APN Carol Ho, after it was too costly to get a vendor to do it.

What did the team learn about each other during this experience?

Following this, our pharmacists, housekeeping, and nursing teams took ownership of all the cupboards, ensuring that everyone played a role in maintaining a clean and welcoming pantry environment.

This experience reinforced the importance of teamwork and shared responsibility. Each department's assigned staff learned to take ownership of the space, which strengthened our collaboration and commitment to keeping the environment clean and organized.

How do staff feel about the pantry now that it is clean and organized?

The feedback from various departments has been overwhelmingly positive. Staff appreciate the thoughtful color-coded design, which makes the pantry feel more welcoming and organized. Many have expressed a sense of ownership over their designated cupboard spaces, leading to a more engaged and responsible approach to upkeep.

Additionally, we've noticed more colleagues from different departments choosing to spend their mealtimes in the pantry, which has fostered a greater sense of community.

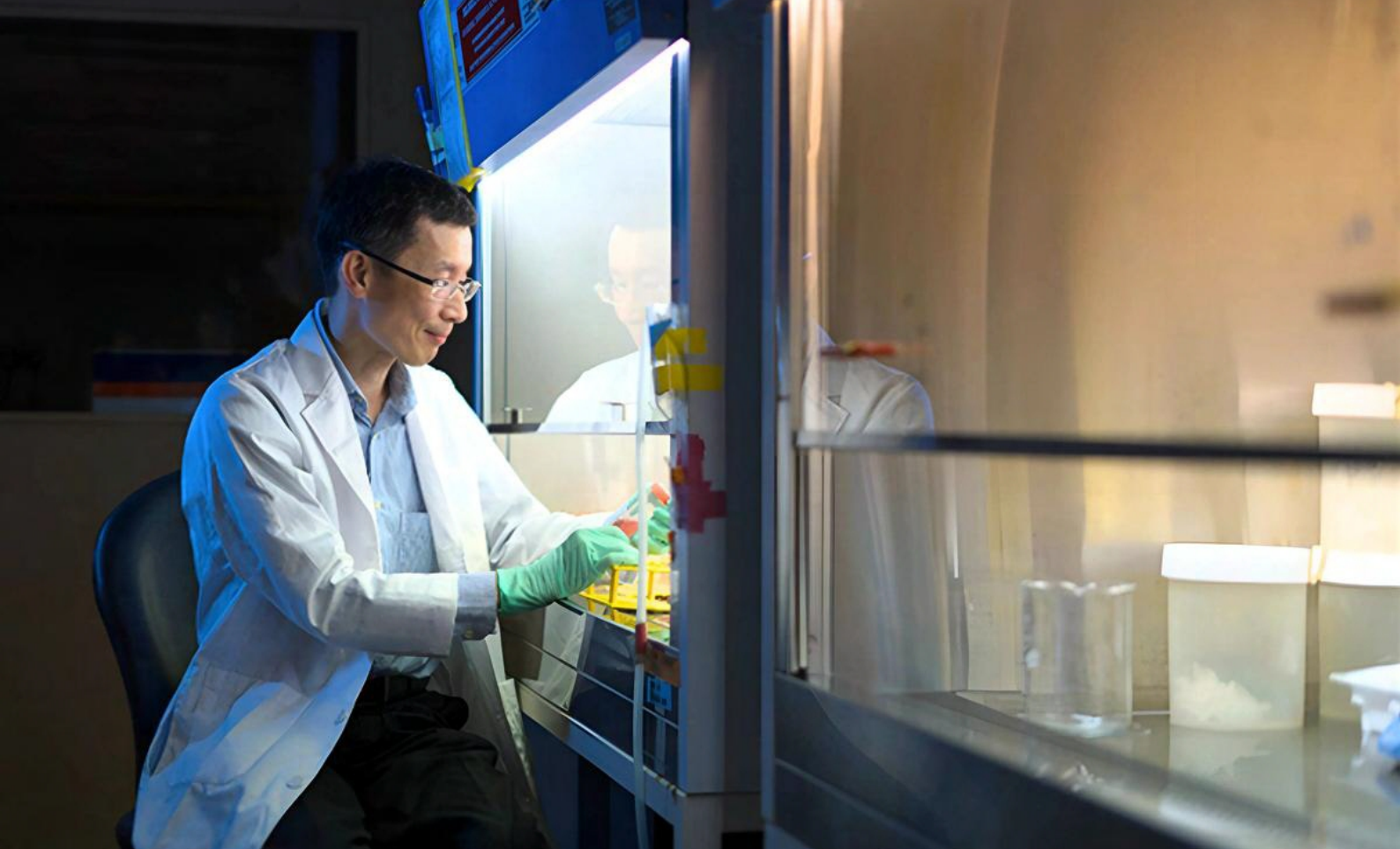
What will the team do to continue to upkeep the pantry?

To sustain cleanliness and organization, we work together with housekeeping to conduct monthly spot checks. These inspections will help ensure that expired food, flammable items, and excessive paper bags - potential hoarding risks - are properly managed and disposed of.



From stacked plates to labelled cups and items, the experience of using the pantry at L9 Cancer Centre has certainly transformed for the better.

The pantry revamp project was completed by Lang Siew Ping, Ung Hie Ching, Foo Pei Ling, Carol Ho, Tan Yongchun, Liu Cuicui, Marini Binte Othman and Lee Foong Gwan.



INCREDIBLE RESEARCH

Blocking Specific Protein Boosts Lung Cancer Treatment

A team of researchers from the Yong Loo Lin School of Medicine, co-led by Prof Goh Boon Cher, has found that blocking a certain protein, SLC1A5, can bring about more effective treatment of lung cancer.

The researchers analyzed plasma samples from lung cancer patients and discovered that SLC1A5 levels were significantly higher in late-stage, treatment-resistant tumors. As a glutamine transporter, SLC1A5 provides energy to cancer cells, helping them survive even during treatment. Targeting the protein could help overcome drug resistance, paving the way for more personalized cancer therapies.

Read more about the study [here](#).

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 from January to March this year! Click on the publication titles below to read more about their research.

Sociobiology Meets Oncology: Unraveling Altruistic Cooperation in Cancer Cells and Its Implications

NCIS Authors: Lee Kwan Min Victor, Ng Siok-Bian

Experimental & Molecular Medicine, Jan 2025 (JIF: 12.153)

EZH2 Modulates mRNA Splicing and Exerts Part of Its Oncogenic Function through Repression of Splicing Factors in CML

NCIS Authors: Jen Wei Ying, Koh Liang Piu, Tan Lip Kun, Esther Chan, Melissa Ooi, Chng Wee Joo

Leukemia, Jan 2025 (JIF: 12.883)

Spatially Resolved Tumor Ecosystems and Cell States in Gastric Adenocarcinoma Progression and Evolution

NCIS Authors: Teh Ming, Yong Wei Peng, Jimmy Bok-Yan So, Raghav Sundar

Cancer Discovery, Jan 2025 (JIF: 38.272)

Feasibility of Long-Range Telesurgical Robotic Radical Gastrectomy in a Live Porcine Model

NCIS Authors: Asim Shabbir, Jimmy Bok-Yan So, Kim Guo Wei

International Journal of Surgery, Jan 2025 (JIF: 13.4)

Pembrolizumab With or Without Bevacizumab in Platinum-Resistant Recurrent or Metastatic Nasopharyngeal Carcinoma: A Randomised, Open-Label, Phase 2 Trial

NCIS Authors: Chong Wan Qin, Low Jia Li, Kenneth Sooi Wei Xiong, Anil Gopinathan, Goh Boon Cher

The Lancet Oncology, Jan 2025 (JIF: 54.433)

Endovascular Versus Best Medical Treatment for Acute Carotid Occlusion Below Circle of Willis (ACOBOW): The ACOBOW Study

NCIS Author: Anil Gopinathan

Radiology, Jan 2025 (JIF: 29.146)

Safety and Efficacy of Minimally Invasive Associating Liver Partition and Portal Vein Ligation for Staged Hepatectomy (ALPPS): A Systematic Review and Meta-Analysis

NCIS Author: Alfred Kow Wei Chieh

International Journal of Surgery, Jan 2025 (JIF: 13.4)

International Myeloma Working Group Immunotherapy Committee Recommendation on Sequencing Immunotherapy for Treatment of Multiple Myeloma

NCIS Author: Chng Wee Joo

Leukemia, Jan 2025 (JIF: 12.883)

Molecular and Pharmacological Heterogeneity of ETV6::RUNX1 Acute Lymphoblastic Leukemia

NCIS Author: Allen Yeoh

Nature Communications, Jan 2025 (JIF: 17.694)

Lung Cancer Screening and Incidental Findings: A Research Agenda: An Official American Thoracic Society Research Statement

NCIS Author: Lee Pyng

American Journal of Respiratory and Critical Care Medicine, Feb 2025 (JIF: 30.528)

Comparing the Efficacy and Safety of Thromboprophylaxis with Enoxaparin Versus Normal Saline After Liver Transplantation: Randomized Clinical Trial

NCIS Author: Alfred Kow Wei Chieh

British Journal of Surgery, Feb 2025 (JIF: 11.122)

Long Term Results of Cenetoclast Combined with FLAG-IDA Induction and Consolidation for Newly Diagnosed and Relapsed or Refractory Acute Myeloid Leukemia

NCIS Author: Jen Wei Ying

Leukemia, Feb 2025 (JIF: 12.883)

First-Line Lorlatinib Versus Crizotinib in Asian Patients with Advanced ALK-Positive NSCLC: 5-year Outcomes from the CROWN Study

NCIS Author: Ross Soo

Journal of Thoracic Oncology, Mar 2025 (JIF: 20.121)

IBCL-2 Dependence is a Favorable Predictive Marker of Response to Therapy for Chronic Lymphocytic Leukemia

NCIS Author: Goh Boon Cher

Molecular Cancer, Mar 2025 (JIF: 41.444)

A Phase I Dose Escalation Study of the HIF-2 Alpha Inhibitor DFF332 in Patients with Advanced Clear Cell Renal Cell Carcinoma

NCIS Author: Alvin Wong

Clinical Cancer Research, Mar 2025 (JIF: 13.801)

Global, Regional, and National Prevalence of Child and Adolescent Overweight and Obesity, 1990-2021, with Forecasts to 2050: A Forecasting Study for the Global Burden of Disease Study 2021

NCIS Author: Tan Ker Kan

The Lancet, Mar 2025 (JIF: 202.731)

Ethical Considerations in AI for Child Health and Recommendations for Child-Centered Medical AI

NCIS Author: Jeevesh Kapur

npj Digital Medicine, Mar 2025 (JIF: 15.357)

A Systematic Benchmark of Nanopore Long-Read RNA Sequencing for Transcript-Level Analysis in Human Cell Lines

NCIS Author: Chng Wee Joo

Nature Methods, Mar 2025 (JIF: 47.99)

Evolution of Esophageal Adenocarcinoma From Precursor Lesion Stem Cells

NCIS Author: Lawrence Ho Khek-Yu

Gastroenterology, Mar 2025 (JIF: 33.883)

Odronextamab Monotherapy in Patients with Relapsed/Refractory Diffuse Large B Cell Lymphoma: Primary Efficacy and Safety Analysis in Phase 2 ELM-2 Trial

NCIS Author: Michelle Poon

Nature Cancer, Mar 2025 (JIF: 23.177)

Global, Regional, and National Burden of Asthma and Atopic Dermatitis, 1990-2021, and Projections to 2050: A Systematic Analysis of the Global Burden of Disease Study 2021

NCIS Author: Tan Ker Kan

Lancet Respiratory Medicine, Mar 2025 (JIF: 102.642)

Thank You for Reading!

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