



National University  
Cancer Institute  
Singapore



NCIS  
Cancer  
Fund



*Every Person Matters*

NCIS Annual Report FY2023

The **National University Cancer Institute, Singapore** (NCIS) is a national specialist centre under the National University Health System (NUHS), and is the only public cancer centre in Singapore that treats both paediatric and adult cancers in one facility. With a broad spectrum of cancer care and management from screening, diagnosis and treatment, to rehabilitation, palliative and long-term care, NCIS's strength lies in the multi-disciplinary approach taken by our clinician-scientists and clinician-investigators to develop a comprehensive and personalised plan for each cancer patient.

## VISION, MISSION & BELIEF



### Our Vision

To be one of the **world's leading comprehensive cancer centre**, dedicated to the prevention, management and cure of cancer.



### Our Mission

In pursuit of **Incredible Care** by setting new standards in cancer care.



### Our Belief

Every Person Matters.

**NCIS Cancer Fund, a sub-fund under the NUHS Fund, provides funds in three areas – financial assistance for financially disadvantaged cancer patients, cancer research, and the education and training of healthcare professionals.**

NUHS Fund Limited is a Company Limited by Guarantee (CLG) and a registered charity with IPC status. The charity was set up to promote medical research and development as well as provide health related services for the benefit of the Singapore Community. Your compassion to support patients, especially those assessed to be in financial need, will make a difference in their journey back to better health.

This report is meant primarily for donors and partners. Please contact the National University Cancer Institute, Singapore by email at [ncis@nuhs.edu.sg](mailto:ncis@nuhs.edu.sg) should you wish to share this report with others.

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# EXECUTIVE DIRECTOR'S MESSAGE



Stepping into the shoes of the Executive Director last year has given me a bird's eye view of NCIS, a humbling yet invigorating experience. With over a decade of collaboration with colleagues and friends, I have witnessed firsthand the progressive growth and success of NCIS, and this can be attributed to three key pillars – Incredible People, Innovative Work and Indomitable Spirit. These factors were especially prevalent in the commemoration of our 15th anniversary.

NCIS's formative history dates back to over 30 years ago, when our services were stationed at the Dentistry Wing of NUH, under the name of The Cancer Institute. An announcement by the Ministry of Health in 2008 that we would be renamed to NCIS marked a new chapter in our story, signifying our key role as a national specialist centre for cancer.

From thereon and through the next 15 years, NCIS has grown to where we are today as the only public centre in Singapore that treats both paediatric and adult cancers in one facility. We continue to build on our strength that lies in our multi-disciplinary approach taken by our clinician-scientists and clinician-investigators to develop a comprehensive and personalised plan for each cancer patient.

We value **Incredible People** as our greatest asset, our team of talents who share in a mutual objective to elevate NCIS's stature to be internationally recognised and future-ready. Each member of the NCIS family has played a part in making NCIS's journey one for the books; this is evident from the team members who staff our outreach efforts, our colleagues who speak at seminars to share their expertise to the community, our volunteers, our donors and even our patients, who have shown remarkable grit and resilience in their fight against cancer.

And it was in this spirit that led to our signature event 'NCIS Celebrates Life', a family carnival that was the highlight of our 15th year. Profiling 10 of our survivors from different walks of life, their stories were shared at the carnival at Suntec City over a weekend, along with educational talks, workout sessions, and interactive booths for the public. Adding to the prestige of the occasion was Ms Jane Ittogi, who attended the launch as our Guest-of-Honour.

The lifeblood of what we do revolves around leading-edge research. This **Innovative Work** defines and drives what we do, and while the end goal is to end cancer for life, we are working towards cancers that we are unable to cure, with higher and longer survival rates. One promising example is a new cancer therapy that harnesses white blood cells from healthy donors to aid in killing patients' cancer cells. It is on a trial basis for two years, and if proven successful, the method could be a potential game-changer for those whose cancers are resistant to standard treatments.

We made our first foray into gamification in the name of cancer awareness and advocating of screening. The casual mobile game, aptly named 'NCIS Fights Cancer', was created as a part of our anniversary celebrations and a refreshing way to convey the importance of health promotion.

Through the highs and lows, from our inception to the unprecedented Covid-19 pandemic and easing into the new norm, the NCIS we have today is because of the **Indomitable Spirit** of our people. It is also what we hope to impress upon each patient who walks through our doors; that we are in this journey with them, and to persevere no matter the odds.

A model of indomitable spirit would be patient 98-year-old Madam Tan, a beneficiary of the NCIS Geri-Onco GOLDEN programme that provides end-to-end care for elderly cancer patients, from point of diagnosis to end of treatment. She had stage 4 colorectal cancer which had spread to her liver, and she was able to regain mobility shortly after a successful surgery.

In the near future, artificial intelligence (AI) will be a conventional method in assisting healthcare operations at NCIS. For instance, AI algorithms have the potential to scour mass medical records and genetic information to identify links that would greatly benefit our researchers. Treatment in the community remains a key area of focus, but its operations will be aided by the convenience of AI.

While we lay the groundwork for the milestones ahead, we extend open arms to anyone who would like to play a part in shaping the next chapter of the NCIS story, whether as a donor, volunteer or collaborator. At NCIS, we believe every person truly matters in the shared journey of eradicating cancer.

“ Exciting times lie ahead as NCIS embarks on a transformative journey to position ourselves as a internationally recognised institution in cancer care. Guided by a strong focus on innovation, strategic collaborations and a commitment to excellence, NCIS 2.0 is poised to be a future-ready cancer centre that will not only be able to meet the challenges and changes head-on, but one which can also pave the way for greater milestones, setting benchmarks for the industry. ”

Adjunct A/Prof Chee Cheng Ean  
Executive Director, NCIS

# NCIS CANCER FUND AT A GLANCE



No. of applications approved

107



No. of patients assisted

75



Beneficiaries with more than one application

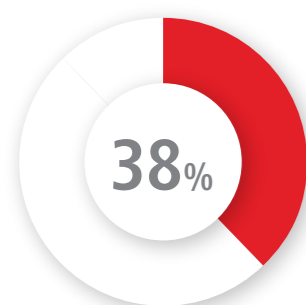
19



Total amount of monetary assistance disbursed

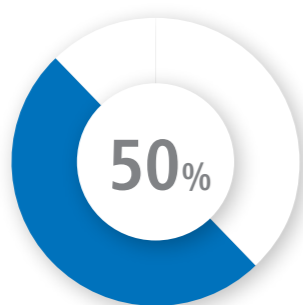
300,808.71

## Citizenship (by application data)



38%

Singapore Citizen



50%

Permanent Resident

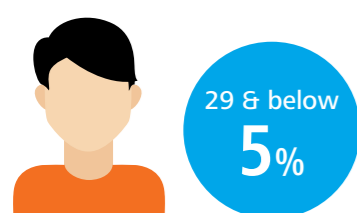


12%

Resident Foreigner

- Support is given to Singaporeans and Permanent Residents for costs not supported by other assistance schemes. The fund also supports Resident Foreigners who have spent a "reasonable" time in Singapore and are part of our Singapore community.

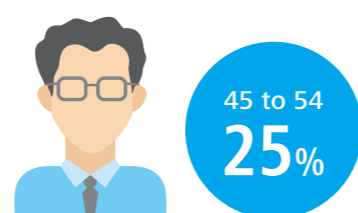
## Age Group (by approved amount)



29 & below  
5%



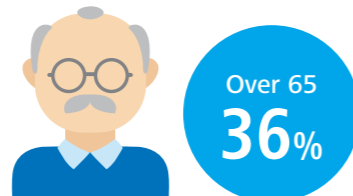
30 to 44  
20%



45 to 54  
25%



55 to 64  
14%



Over 65  
36%

- The largest segment (aged 65 and above) reflects the prevalence of chronic diseases in an ageing population.

## Funding Range (by application data)



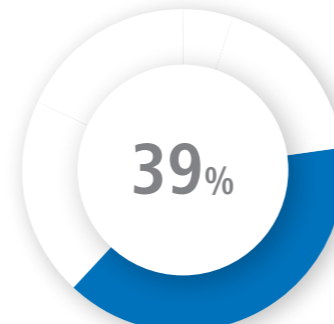
5%

\$300 & below



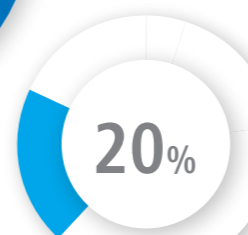
18%

\$301 to \$1000



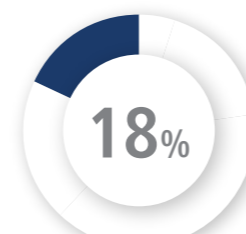
39%

\$1001 to \$2500



20%

\$2501 to \$5000

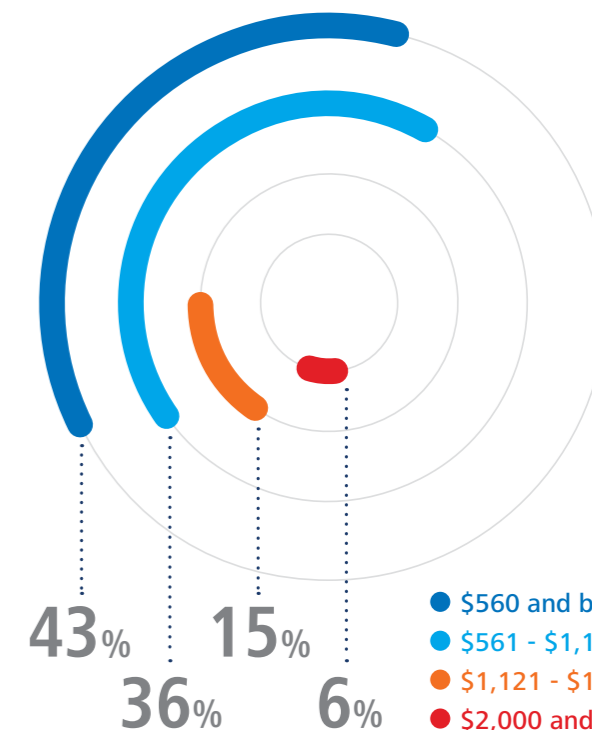


18%

\$5000 to \$20000

- Funding support provided is crucial to our beneficiaries as their medical expenses exceed their Per Capita Income.
- In order to help as many patients as funds allow, the cap for financial assistance is currently set at \$20,000.

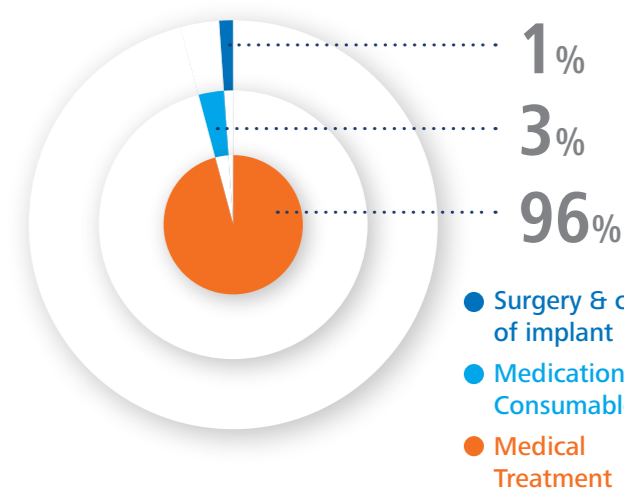
## Per Capita Income (by application data)



- 43% \$560 and below
- 36% \$561 - \$1,120
- 15% \$1,121 - \$1,999
- 6% \$2,000 and above

- Approved funding amount is based on financial assessment by Medical Social Workers.
- 79% of our beneficiaries belong to the lowest 20% of our community by Household Income (Dept of Statistics), Year 2021.

## Support Category (by approved amount)



- 1% Surgery & cost of implant
  - 3% Medication & Consumables
  - 96% Medical Treatment
- Funding is provided to support treatment costs not funded by existing assistance schemes.
  - Funding support provided to cancer patients are mainly for PET scans. This helps physicians detect cancer, evaluate the extent of disease, select the most appropriate treatments, determine if the therapy is working and detect any recurrent tumours.

# FUNDRAISING INITIATIVES

## CanCycle

January - February 2023

A collaborative initiative involving the Cancer Science Institute of Singapore (CSI), NUS Centre for Cancer Research (N2CR), and NCIS, CanCycle was a fundraising cyclethon aimed at supporting laboratory research efforts that directly translate to better care and treatment for cancer patients. The virtual event attracted 92 cyclists, including families, with the youngest participant being 8 years old.

The inaugural campaign, held at the beginning of 2023, generated over \$52,000 in funds. Due to its success, a second edition of CanCycle was organised towards the end of 2023, extending into early 2024.



## Cyclists Vs Cancer

15 & 22 July 2023

A team of cyclists led by Mr Noel Tan, a cycling enthusiast and former dedicated caregiver, covered approximately 500 kilometres over two weekends to raise 12,000 for the NCIS Cancer Fund. The gruelling route commenced in the early hours of the day, enduring various weather conditions from rain to sunshine, as they pedaled across the entire island to fulfill their objective. Initiated by Noel in 2022, this endeavour is a continuation to serve as a means of supporting cancer patients like his late wife, who received care at NCIS.

## The Last Mile Concert

30 November 2023

The Last Mile concert served as a poignant conclusion to NCIS's 15th-anniversary celebrations. Held at the School of the Arts (SOTA) Concert Hall, the event attracted about 370 attendees. Proceeds from the concert went to the NCIS Cancer Fund in support of palliative care initiatives. Senior Parliamentary Secretary Eric Chua, from the Ministry of Social and Family Development and Ministry of Culture, Community, and Youth, graced the occasion as the Guest-of-Honour.

The lineup featured an array of local musical talents, including Dr Azariah Tan, Joanna Dong, Lorong Boys, M'Ode Wind Quintet, and Teo Poh Yin, a Senior Pharmacist from NCIS who showcased her guitar skills. A highlight of the evening was a surprise duet performed by Mr Chua and Ms Teo, accompanied by the Lorong Boys on instruments. **"The work that you do – caring for the terminally ill and giving them comfort and dignity in their last days – is difficult but so critical and meaningful,"** shared Mr Chua.



## NCIS Celebrates Life

4 & 5 November 2023

The commemoration of NCIS's remarkable 15-year journey culminated in a "NCIS Celebrates Life" family carnival held at Suntec City, Atrium 3 and 4. Graced by Guest-of-Honour Ms Jane Ittogi, the event brought together cancer survivors, their families, and the wider community to honour the resilience of our courageous cancer fighters, spread awareness about the latest cancer treatments and advancements, and raised over \$10,000 for the NCIS Cancer Fund.

Ms Ittogi said, **"We are here to celebrate the inspiring lives of cancer survivors as well as the devoted caregivers and loving families who have journeyed with them."**



The unveiling of the "Bell of Hope" saw Ms Ittogi and NCIS Executive Director Adj A/Prof Chee Cheng Ean join eight cancer survivors in ringing similar bells, symbolising the beginning of a new chapter in their lives and offering encouragement to those still battling cancer. The "Tree of Life" provided an opportunity for the public to share well-wishes and words of encouragement for cancer patients.

Sarcoma survivor Mr Chang Fook Tin and breast cancer survivor Madam Rahimah Bahri took the stage to share their personal journeys of overcoming cancer and stress the importance of early detection through screening.

The event also featured captivating performances by NCIS Senior Pharmacist Teo Poh Yin and local artiste Joanna Dong, offering a glimpse of their performance for the upcoming NCIS fundraising concert, "The Last Mile," dedicated to supporting cancer patients on terminal discharge.

Adding an interactive element, NCIS launched its inaugural mobile game, "NCIS Fights Cancer," designed to engage and educate the public on cancer screening and prevention through an entertaining format. The game also incorporated a fundraising feature, allowing players to purchase in-game boosters to enhance their gameplay experience and compete for prizes sponsored by generous donors.



# NCIS PROGRAMMES

Cancer care covers a wide range of services for patients at different parts of their journey. At each stage, we aim to provide comprehensive support beyond clinical treatment, and our programmes are designed to achieve this goal.

## NCIS Dream Makers

The NCIS Dream Makers Fund, a sub fund of the NUHS Fund, is a programme that embodies the belief that even the smallest gestures can have a profound impact on patients battling advanced cancers. This initiative offers an avenue to enhance their quality of life outside of conventional care. NCIS works closely with both patients and their loved ones to bring their wishes to fruition.



Ms Yuehong (in black), a stage 4 ovarian cancer patient, expressed her desire to spend precious moments with her beloved dog, Toffee. To fulfill her wish, arrangements were made for a one-night stay at a pet-friendly hotel along with a heartfelt family photoshoot, capturing cherished memories.



Diagnosed with Myelodysplastic Syndrome and nasopharyngeal cancer, Madam Siew Poh (front row, in pink) was a family-oriented person who treasured her time spent caring for her children and grandchildren. Her wish was to create lasting memories with them. To make this possible, a chalet staycation was arranged, where they were they bonded over a BBQ dinner and enjoyed the time spent together.



## Personalised Wellness Programme (PWP)

The Personalised Wellness Programme (PWP) is dedicated to providing tailored support to patients, spanning from diagnosis to end-of-life care, encompassing treatment and survivorship phases. The PWP offers a range of activities designed to promote the overall well-being and health of cancer patients.

These activities include Yin Yoga sessions, educational sessions such as the Living With Cancer Education Series (LWCES), patient support group meetings such as garden walks, breakfast gatherings, and cooking demonstrations.

## NCIS On The Go

In response to Singapore's ageing population and the need to alleviate pressure on public hospitals, the government is increasingly emphasising community and home-based care. Reflecting this trend, the NCIS On The Go programme operates as an innovative care model, delivering cancer treatment directly to the community. Staffed by NCIS nurses, patients receive the same high-quality care they would at NUH but with the added convenience of reduced hospital visits and proximity to their homes, allowing more time for familial and personal commitments.

In the past year, NCIS On The Go expanded its services to include the administration of zoledronic acid, a drug aimed at preventing cancer-related fractures. Its regular services encompass various nursing procedures and cancer treatment services such as blood collection, central venous line care, and pump management. Currently, there are three clinics located in Clementi, Keat Hong, and Jurong East, with plans underway to establish a fourth clinic in 2024.



# HELPING CANCER PATIENTS



Last year, NCIS received 107 approved applications for financial assistance from the NCIS Cancer Fund.

The fund plays a vital role in enabling disadvantaged cancer patients to access essential and potentially life-saving cancer treatments. Assistance provided ranges from facilitating prompt treatment initiation to ensuring the seamless continuation of treatment and follow-up care.

Some of our fund beneficiaries and their family members share about their cancer journey.

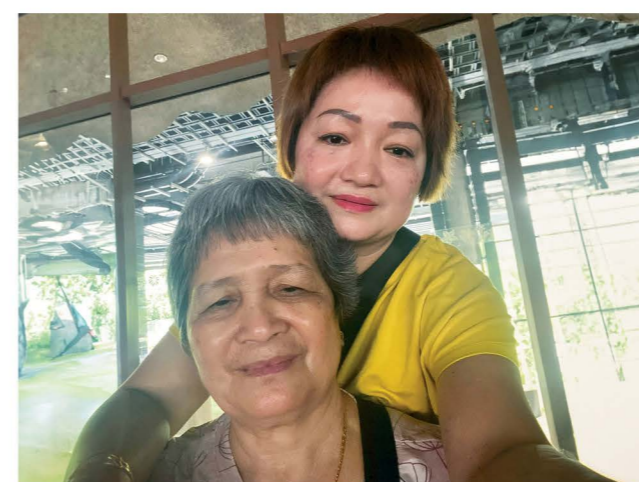
“ As a patient, I am already fatigued from the treatment and fighting cancer. Having the assistance from NCIS Cancer Fund is truly a blessing as I do not have to worry about how to pay my bills, and I can focus on keeping to my appointments instead. A reduced mental burden also enables me to provide better care for my mum, who is also a cancer patient, and my daughter. ”

39-year-old patient Ms Safarliyana (2nd from left), with her daughter and parents



“ It is painful to see my mum facing a cancer diagnosis twice. She intended to help me care for my 2 school-going children but due to her stage 3 breast cancer, I am her caregiver. Being the main breadwinner for my kids and my mother, it is tough for me, so we are both very relieved and grateful for the financial support. My mum is able to concentrate on looking after her health and go for her checkups, and her mind is more at ease now. ”

Madam He Liu (in yellow), with her 69-year-old mother and patient Ms Lin Daofei



To find out more about the NCIS Cancer Fund, scan the QR code or visit <https://for.sg/nciscancerfund>

# PUBLIC EDUCATION

While advancements in cancer treatment offer hope to patients, a comprehensive approach that includes cancer awareness and education remains paramount in combating a disease responsible for an average of 16 deaths per day<sup>1</sup> in Singapore. According to global statistics, over 40% of cancer-related deaths are preventable<sup>2</sup>, linked to modifiable risk factors like smoking, alcohol consumption, and lifestyle choices such as poor diet and physical inactivity.

Recognising the significance of community outreach in disseminating messages about screening, symptom awareness, and healthy living, NCIS is committed to engaging diverse audiences through educational talks delivered by our specialists. These talks cover a wide array of cancer-related topics and are conducted both in physical and virtual settings, attracting participants from as far as the USA, Australia, and Sri Lanka.

<sup>1</sup> <https://www.singaporecancersociety.org.sg/learn-about-cancer/cancer-basics/common-types-of-cancer-in-singapore.html>

<sup>2</sup> <https://www.worldcancerday.org/what-cancer>



Talks (Zoom/on-site)

15



Topics covered

40



Attendees

3,349



Community partnerships

15

# PROFESSIONAL ENGAGEMENT

While community education remains crucial, there is also a pressing need for healthcare professionals to stay updated with the latest medical knowledge and skills. To address this, NCIS hosts monthly oncology Grand Round webinar sessions, serving as a platform for experts to impart their knowledge and insights to fellow colleagues. These sessions feature specialists from various departments within NUH, along with guest speakers from overseas, attracting an average attendance of 100 healthcare professionals per session.

Recognising the pivotal role of primary care physicians in the community as the first point of contact for care, NCIS organises General Practitioners Continuing Medical Education (GP CME) sessions to ensure these practitioners deliver quality care to patients. These sessions offer updates on cancer trends, treatment approaches, and screening options.

More than 600 general practitioners and family physicians have participated in these sessions, providing positive feedback on the value of staying informed about the latest developments in the medical field and the opportunity to exchange knowledge with specialists. Additionally, overseas healthcare professionals view these sessions as an invaluable opportunity to broaden their knowledge and learn from Singapore's experts.



Talks (Zoom)

13



Healthcare Professionals

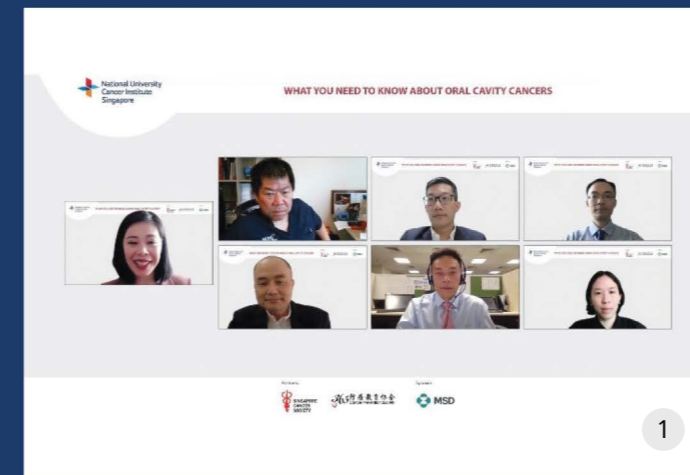
1,896



1



2



1



2



3

1. NCIS and our partners at the Breast Cancer Awareness Month (BCAM) press conference.
2. Members of the public at our inflatable colon exhibit.
3. Our speakers giving a talk on brain cancer at the Winning Against Cancer Public Symposium.



3

1. Virtual Forum on What You Need to Know About Oral Cavity Cancers.
2. A participant posing a question at an NCIS public forum.
3. A BCAM forum that reaches out to our Malay cancer patients.

# RESEARCH @ NCIS

## 268

Active clinical trials

(Focus on Early Phase and Immunotherapy trials)

## 87

Collaborations with industry partners since 2010\*

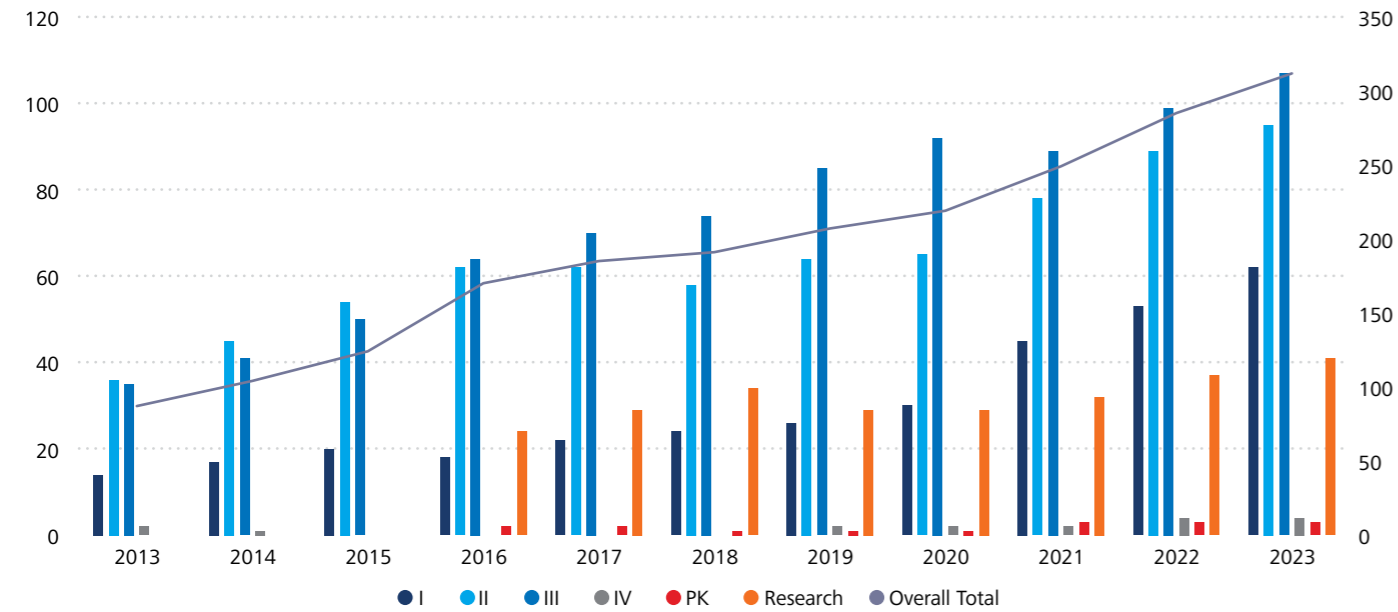
## 106

Early Phase I Trials since 2010\*

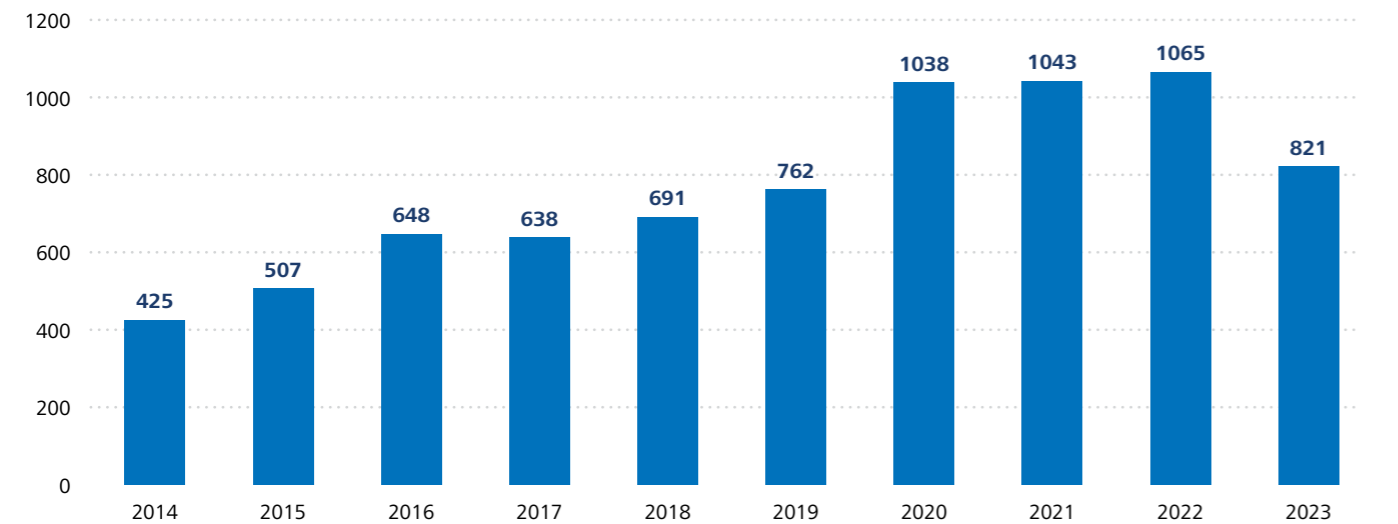
## 137

Immunotherapy trials since 2014\*

\*Cumulative total



# NCIS RESEARCH PUBLICATION



# RESEARCH IN THE SPOTLIGHT

## New cancer therapy uses white blood cells from healthy donors

Trial to determine if allogeneic T cells can deliver more effective treatment

Joshua Teo

A new treatment using white blood cells from healthy donors that are modified to more effectively recognize and kill cancer cells will be tested in Singapore clinical trials. The two-year trial at the National Cancer Institute, Singapore (NCIS) will test the therapy on 100 patients who have lung cancer, multiple myeloma, colorectal cancer, breast cancer, or ovarian cancer - six of the most common types of cancer in Singapore.

The new treatment, developed by local biotech firm CytoMed Therapeutics, treats cancer patients with modified T cells - a type of white blood cell that helps the body fight infections and diseases, including cancer.

CytoMed's new treatment potentially advances existing chimeric antigen receptor (CAR) T-cell therapies by using white blood cells from healthy, cancer-free donors instead of from cancer patients themselves, as is the current practice.

Cancerous cells are occasionally able to evade detection by the body's immune system, and this is where cell-based immunotherapies like the CAR T-cell therapy "come in".

"T cells in our body may not always be able to recognize or kill cancer cells, because the cancer cells can disguise themselves as healthy cells and produce signals that can mislead the patient's immune cells at the same time," said CytoMed's chief operating officer, Dr. Esther Chan.

"CytoMed's new product grafts an artificial receptor, known as a chimeric antigen receptor, on the surface of donor T cells and then targets and destroys cancer cells



CytoMed Therapeutics chief operating officer Tan Lip Kuan (second from left) with Dr. Esther Chan (left), Dr. Raghav Sankar and Dr. Tan Lip Kuan from the National Cancer Institute, Singapore.

more effectively."

"The CAR T-cell therapy is much more targeted than conventional chemotherapy, which kills both cancer cells and healthy cells. The new CAR T-cell therapy is more targeted and has a higher quality, since they are obtained from healthy donors instead of from cancer patients themselves, which means that the T cells are obtained from healthy donors, who do not have to be genetically matched with the intended patients."

"First allogeneic T cells may be of higher quality, since they are obtained from healthy donors instead of from cancer patients themselves, which means that the T cells are obtained from healthy donors, who do not have to be genetically matched with the intended patients."

"These patients tend to have higher risk, relapse or resistant cancers, and would have undergone several courses of chemotherapy or other types of immunotherapy, so their own T cells are fewer and weaker. This makes it harder to genetically engineer and transplant enough CAR T cells to recognize and fight the cancer cells."

Dr. Tan Lip Kuan, a senior consultant at NCIS and one of the trial's investigators, said: "The trials' focus on allogeneic CAR T-cell therapies by using white blood cells from healthy, cancer-free donors instead of from cancer patients themselves, as is the current practice. If this new therapy could become commercially available, it would be a major advance for cancer patients."

Dr. Chan said: "The trial will be expanded to more patients if successful. Dr. Chan estimated that it would be around five to eight years before the new therapy could become commercially available."

Dr. Chan said: "The trial will be expanded to more patients if successful. Dr. Chan estimated that it would be around five to eight years before the new therapy could become commercially available."

## New cancer therapy uses white blood cells from healthy donors

A novel treatment approach utilising T-cells sourced from healthy donors will be tested on a small cohort of patients diagnosed with six prevalent cancer types in Singapore. Developed by local biotechnology company CytoMed Therapeutics, this method represents a significant advancement in chimeric antigen receptor (CAR) T-cell therapies, which traditionally rely on harvesting cells from the patients themselves.

Key advantages of this innovative approach include its allogeneic nature, removing the need for genetic compatibility between donor and recipient T-cells, and the potential for higher quality T-cells sourced from healthy donors compared to those extracted from patients.

Dr Esther Chan, Senior Consultant, Department of Haematology-Oncology, NCIS who is involved in the trial, said: **"Car T-cell therapy can be a life-saving treatment for many patients who are given a slim to no chance of survival. This is the first locally designed trial that uses an allogeneic method to modify cells to right cancer."**

The trial will run for two years from April 2023, and will be offered to more patients if successful.

# 国大癌症中心首个发现: 肺癌口服药为罕见癌症病患带来曙光

Mr Keh Zi Hang, 23, has multiple cancerous tumours in his body, but that has not stopped him from graduating from university, helping his father in the family business and even opening his own restaurants. He was diagnosed with advanced inflammatory myofibroblastic tumours (IMT) and has been on different drug regimens since 2017.

A breakthrough came in June 2023 when Dr Anand Jeyasekharan, Consultant, Department of Haematology-Oncology, NCIS, performed a next-generation sequencing of Mr Keh's tumour, which confirmed the presence of a ROS1 fusion. He started Mr Keh on Ceritinib, an oral medication usually used to treat patients with stage 4 lung cancer.

After three months, Mr Keh's tumours vanished and could no longer be detected on scans. Dr Jeyasekharan said this could be the first report in the world of Ceritinib being used for this sub-type of IMT and his team plans to report on this in a medical journal.

## 国大癌症中心首个发现 肺癌口服药为罕见癌症病患带来曙光



郭子航在中学时被确诊为炎症性肌纤维母细胞瘤晚期，这个罕见的癌症发病率少于100万分之一。2022年国大癌症中心为他进行了下一代基因测序，在全球学界首个发现第四期肿瘤的口服药能抑制此病的基因突变，并缓解肿瘤。

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# MEDIA HIGHLIGHTS

## NCIS's Geri-Onco GOLDEN programme has improved quality of life for over 1,000 senior cancer patients

Over 1,400 elderly cancer patients have benefitted from the NCIS Geri-Onco GOLDEN programme, formerly known as the Geriatric Oncology Longitudinal End to End (GOLDEN) programme.

The programme, which is the first of its kind in Singapore, offers holistic clinical care from cancer diagnosis to the end of treatment, and it is available at NUH and NTFGH. Elderly cancer patients aged 75 and older undergo thorough

screening for suitability, including a comprehensive assessment that may incorporate telemedicine to streamline the process and minimise visit duration.

A multi-disciplinary team comprising experts in oncology, geriatric medicine, and allied health workers collaborates to address the diverse needs of this patient demographic, which often includes managing multiple comorbidities, functional limitations, and cognitive challenges.

Adjunct Associate Professor Francis Ho, Head and Senior Consultant, Department of Radiation Oncology, NCIS, said:

**“Given that the provision of care for older adults with cancer presents the unique challenge of requiring expertise in both oncological and geriatric issues, most cancer programmes are still lacking in terms of meeting the complex needs of these patients. Consequently, in recent years, there has been an increasing urgency to address that through training and subsequently, the introduction of dedicated geriatric oncological models of care delivery.”**

### 个人化照料包括调节饮食治疗和辅导

## 国大医院黄金计划逾千年长癌患受益

自2019年8月起，国大癌症中心老年肿瘤黄金计划已经帮助了超过1400名长期癌症患者。计划旨在解决这些患者特有的治疗需求，包括长期癌症患者常见的患有慢性病、体质虚弱、营养不良、食用多种药物和水后并发性低钠血症等。

65岁以上的癌症患者在国大癌症中心接受治疗，除了接受全面的癌症治疗和护理外，还可能接受饮食和营养方面的辅导。辅导内容包括：评估患者的营养状况，制定个性化的饮食计划，提供营养补充建议，以及监测和管理与治疗相关的副作用。

此外，黄金计划还为患者提供心理和社会支持。护理人员会与患者及其家人合作，帮助他们应对治疗带来的压力和焦虑。此外，护理人员还会提供有关癌症治疗和护理的信息，帮助患者做出明智的决策。

黄金计划的目标是改善老年癌症患者的生活质量，帮助他们更好地应对癌症治疗带来的挑战。通过提供个性化的照料和支持，黄金计划旨在帮助老年癌症患者实现最佳的治疗结果。



图大癌症中心老年肿瘤黄金计划团队正在为患者提供个性化的照料和支持。图中显示，医护人员正在与患者及其家人讨论治疗方案，并提供饮食和营养方面的辅导。

显示，61%参与计划的患者改善了他们的生活质量。73%的患者在计划实施后，他们的症状得到了更好的控制。此外，患者对治疗的依从性也有所提高。

图大癌症中心老年肿瘤黄金计划团队正在为患者提供个性化的照料和支持。图中显示，医护人员正在与患者及其家人讨论治疗方案，并提供饮食和营养方面的辅导。

## Play your way to better health

In an effort to expand health education outreach and promote participation in cancer screenings among eligible individuals, NCIS has turned to gamification as a strategy.

Named NCIS Fights Cancer, this web-based mobile game garnered significant interest, with approximately 1,300 individuals engaging with it during its online presence. Some players accessed the game multiple times daily.

Launched in commemoration of NCIS's 15th anniversary, the game was unveiled to the public at the NCIS Celebrates Life event, a family carnival where Ms Jane Ittogi attended as the Guest-of-Honour. Beyond its primary objective of health promotion, the game also served to raise funds. Through in-game booster purchases, proceeds were directed to the NCIS Cancer Fund.

Working together with Sqkii, a game developer, Dr Kenneth Sooi, an Associate Consultant at the Department of Haematology-Oncology at NCIS, who has a passion for gaming, shared that **the idea was a light-hearted and engaging way to approach the serious topic of cancer. He elaborated that the team was mindful to ensure that the game was inclusive and fun to play for all ages, but not too complicated to learn and be familiar with.**

## PLAY YOUR WAY TO BETTER HEALTH



Akhila Nanda, Game Developer

Health institutions and doctors are using games as light-hearted ways to spread awareness of topics that can be tedious, such as cancer.

“It's a fun way to engage people with health education. Games are a great way to reach people who may not be interested in traditional health education. Games can also be used to teach people about cancer and its prevention. Games can also be used to raise awareness of cancer and its prevention. Games can also be used to raise awareness of cancer and its prevention.”



Dr Kenneth Sooi, Associate Consultant at the Department of Haematology-Oncology at NCIS, who has a passion for gaming, shared that the idea was a light-hearted and engaging way to approach the serious topic of cancer. He elaborated that the team was mindful to ensure that the game was inclusive and fun to play for all ages, but not too complicated to learn and be familiar with.

# WHAT'S NEXT

In the coming years, the public and our patients can expect significant changes, particularly in the areas of the NCIS facilities, treatment approaches, and its suite of services. NCIS is fully prepared to embrace these changes, aiming to enhance the delivery of exceptional cancer care tailored to each individual patient's needs.



## Comprehensive Care for Patients

The redevelopment and expansion of levels 8 to 10 of the NUH Medical Centre, where the NCIS Specialist Outpatient Clinics are housed, will ensure that the institute continues to have sufficient capacity to address a growing need for cancer services. Besides an improved working environment for staff, factors such as sustainability and climate-friendly will also play a part in shaping the facility transformation.

With the provision of a rehabilitation centre at NCIS clinic compounds, patients can benefit from this new additional service which also serves to enhance the NCIS campus as a one-stop centre. Made possible by a collaboration with Singapore Cancer Society, patients can expect [insert USPs... exercise equipment and classes manned by trained healthcare professionals, etc].

Since the NCIS On The Go programme was launched in 2017, it has branched out to more clinic locations within the west region and expanded the list of available treatments. Its latest outreach will see a fourth clinic situated at Serangoon, which will avail its services and offer greater convenience to the wider population.

## Leveraging on Technology for Patient Care

The use of AI in the healthcare industry has increased exponentially in recent years, with the trend set to continue. With plans to leverage on the latest technology that will be harnessed by a pool of tech-savvy clinician scientists at NCIS, the aim is to build a precision oncology ecosystem and accelerate translation of research to achieve better clinical results for patients.

Data science will also be a key area of focus at NCIS in the near future. The extraction of meaningful insights and data can transform cancer care and help further cancer education. Advantages would include improving clinical trials, escalating drug discoveries, and better control of drug testing/reactions.





## Let's come together to do more.

If you care about the community's health and well-being, join us by volunteering for our events! We also welcome collaboration opportunities and we host learning journeys so you get a firsthand glimpse of the healthcare industry, including the workings of a public cancer centre.

## Towards a better tomorrow for all.

If you have a keen interest in the dynamic field of oncology and would like to join our multi-disciplinary team of talents to chart the future of cancer care together, we want to hear from you! Check out the Careers page or send us your portfolio with a cover letter.

## A gift of hope and courage to fight cancer.

Your donation will make a difference to the lives of cancer patients. It aids those with financial burdens, furthers research and treatment outcomes, and grows the competency of the healthcare professionals.

For volunteering and collaboration opportunities, write to [ncis\\_comms@nuhs.edu.sg](mailto:ncis_comms@nuhs.edu.sg) with details of your interest areas and availability.

For career opportunities, visit <https://for.sg/careersatncis>



◀ For donations to the NCIS Cancer Fund, scan the QR code



5 Lower Kent Ridge Road,  
Singapore 119074



(65) 6773 7888



[Appointment@nuhs.edu.sg](mailto:Appointment@nuhs.edu.sg)



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