

MEDIA RELEASE

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For Immediate Publication

NUHS LAUNCHES SINGAPORE'S LARGE-SCALE NOSE CANCER SCREENING RESEARCH STUDY IN THE COMMUNITY

The aim is to study how to effectively detect early-stage nose cancer and enhance risk prediction, as majority of patients tend to be diagnosed with late-stage disease due to its clinical silence

SINGAPORE — A large-scale community-based research study on the effectiveness of using testing for Epstein-Barr virus (EBV) to help detect nasopharyngeal cancer (NPC) has been extended to three more polyclinics in the western region of Singapore. The study was launched in November 2022 as part of a large collaborative research grant to improve early diagnosis and survival rate of nose cancer.

Commonly known as nose cancer, NPC is the third most common cancer among 40 to 49 year old males in Singapore.

Led by institutions under the National University Health System (NUHS), namely the National University Hospital (NUH), National University Polyclinics (NUP), and National University Cancer Institute, Singapore (NCIS), the study aims to evaluate the effectiveness of EBV screening to detect early-stage NPC and enhance risk prediction. Through this study NUHS also hopes to analyse and develop a cost-effective screening model for patients, healthcare institutions and the community to improve the health outcomes of patients through early diagnosis.

The study, which is currently conducted in Jurong and Pioneer Polyclinics, will be extended to Bukit Batok, Chua Chu Kang and Clementi Polyclinics. It is complimentary for participants and consists of a blood draw for a serology test performed by trained nursing and phlebotomy staff, self-collection for saliva as well as a questionnaire. The serology tests are performed in partnership with Pathnova Laboratories, a clinical laboratory where the EBV serology technique using immunofluorescence was developed in Singapore.

Individuals assessed through the tests to be at higher risk of NPC will be referred to specialists at the Ear, Nose and Throat (ENT) – Head and Neck Surgery Centre at NUH for further evaluation. The evaluation will comprise a head and neck examination, including a nasoendoscopy and nasopharyngeal biopsy which are low-risk procedures for NPC diagnosis.

NUHS hopes to invite 20,000 individuals between the ages of 35-60 years old to participate in the study over a period of five years.

NPC affects people of Chinese ancestry, particularly from Southern China, as well as the Malay and indigenous Southeast Asian populations. Due to non-specific symptoms of NPC and clinical silence of early-stage tumour, the majority of NPC patients tend to be diagnosed with late-stage disease, with less than 10 per cent of patients diagnosed at Stage 1. This has a bearing on prognosis and treatment for NPC patients — for those at a more advanced stage at diagnosis, poorer survival rates are expected and those who recover face up to a 40 per cent chance of a relapse.

Associate Professor Thomas Loh Kwok Seng, Senior Consultant, Department of Otolaryngology – Head & Neck Surgery, NUH and Division of Surgical Oncology, NCIS, said: “Early detection and treatment for nose cancer is critical as it can make a huge difference in outcome. From our experience in screening family members, 80 per cent of NPC cases were diagnosed at an early stage (Stage 1 and 2). In contrast, among patients diagnosed with NPC in our otolaryngology clinics, only one-third presented with early stage disease.”

“This study will allow us to reach out to the at-risk population in the community, to identify and effectively treat early-stage disease. Eventually, we hope that this will help us develop an evidence-based strategy to conceptualise a cost-effective and practical screening model to dramatically increase NPC early diagnosis rates.” A/Prof Loh is also the Group Chairman of the Medical Board at NUHS.

“Early screening, identification of diseases and prevention are core principles of primary care. Polyclinics are optimally positioned to address such needs of patients and families in the community. NUP is glad to lend support to help in the recruitment of participants for this study,” said Dr Yeo Hui Nan, Family Physician, Associate Consultant, Jurong Polyclinic.

If found and treated at an early stage, nose cancer survival and cure rates are usually positive, with a 10-year survival rate of above 90 per cent for patients with Stage 1 tumour.

NPC is consistently associated with EBV infection, but it still unclear why only some individuals, particularly the Southern Chinese, develop NPC, while over 90 per cent of the world population are infected by EBV.

The study is funded by a prestigious Open Fund-Large Collaborative Grant that was awarded to a multi-institutional research team from NCIS, A*STAR’s Genome Institute of Singapore (GIS), and National Cancer Centre Singapore (NCCS). The fund is supported by the National Research Foundation, Singapore and administered by the Singapore Ministry of Health’s National Medical Research Council. The integrated research programme is carried out in collaboration with Professor Liu Jian Jun from A*STAR’s GIS and Associate Professor Melvin L. K. Chua from NCCS to improve the early diagnosis and survival rates of patients with NPC.

Chinese Glossary

National University Health System (NUHS)	国立大学医学组织 (国大医学组织)
National University Hospital (NUH)	国立大学医院 (国大医院)
National University Polyclinics (NUP)	国立大学综合诊疗所 (国大综合诊所)

National University Cancer Institute, Singapore (NCIS)	新加坡国立大学癌症中心 (国大癌症中心)
Associate Professor Thomas Loh Kwok Seng Senior Consultant, Department of Otolaryngology – Head & Neck Surgery, NUH Group Chairman, Medical Board, NUHS	羅国声副教授 高级顾问医生,耳鼻喉科, 国大医院 医疗委员会集团主席, 国立大学医学组织
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About the National University Health System (NUHS)

The National University Health System (NUHS) aims to transform how illness is prevented and managed by discovering causes of disease, development of more effective treatments through collaborative multidisciplinary research and clinical trials, and creation of better technologies and care delivery systems in partnership with others who share the same values and vision.

Institutions in the NUHS Group include the National University Hospital, Ng Teng Fong General Hospital, Jurong Community Hospital and Alexandra Hospital; three National Specialty Centres - National University Cancer Institute, Singapore (NCIS), National University Heart Centre, Singapore (NUHCS) and National University Centre for Oral Health, Singapore (NUCOHS); the National University Polyclinics (NUP); Jurong Medical Centre; and three NUS health sciences schools – NUS Yong Loo Lin School of Medicine (including the Alice Lee Centre for Nursing Studies), NUS Faculty of Dentistry and NUS Saw Swee Hock School of Public Health.

With member institutions under a common governance structure, NUHS creates synergies for the advancement of health by integrating patient care, health science education and biomedical research.

As a Regional Health System, NUHS works closely with health and social care partners across Singapore to develop and implement programmes that contribute to a healthy and engaged population in the Western part of Singapore.

For more information, please visit www.nuhs.edu.sg.

About the National University Hospital (NUH)

The National University Hospital (NUH) is Singapore's first university hospital. While the hospital at Kent Ridge first received its patients on 24 June 1985, our legacy started from 1905, the date of the founding of what is today the NUS Yong Loo Lin School of Medicine. NUH is the principal teaching hospital of the medical school.

Our unique identity as a university hospital is a key attraction for healthcare professionals who aspire to do more than practise tertiary medical care. We offer an environment where research and teaching are an integral part of medicine, and continue to shape medicine and transform care for the community we care for.

We are an academic medical centre with over 1,200-beds, serving more than one million patients a year with over 50 medical, surgical and dental specialities. NUH is the only public and not-for-profit hospital in Singapore to provide trusted care for adults, women and children under one roof, including the only paediatric kidney and liver transplant programme in the country.

The NUH is a key member of the National University Health System (NUHS), one of three public healthcare clusters in Singapore.

About the National University Polyclinics (NUP)

The National University Polyclinics (NUP) is a member of the National University Health System (NUHS), a leading academic health system and one of three public healthcare clusters in Singapore.

NUP provides primary care treatment for acute illnesses, management of chronic diseases, women and children health services, and dental care at its network of polyclinics at Bukit Batok, Bukit Panjang, Choa Chu Kang, Clementi, Jurong, Pioneer, and Queenstown (with Taman Jurong, Tengah and Yew Tee to come).

As part of an integrated academic health system, NUP collaborates with the hospitals and national specialty centres within NUHS as well as partners in the community, such as general practitioners, grassroots, and social care agencies, to provide patient-centred care for the population.

For more information, please visit www.nup.com.sg

About the National University Cancer Institute, Singapore (NCIS)

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. NCIS (n-sis) offers 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.

NCIS cancer services span across several acute hospitals: NCIS @ National University Hospital, NCIS @ Ng Teng Fong General Hospital, NCIS @ Alexandra Hospital, and the NCIS Radiation Therapy Centre @ Tan Tock Seng Hospital. We also deliver a range of cancer services for our patients' convenience at satellite clinics in the community, as well as in the comfort of their homes. For more information, please visit www.ncis.com.sg.

Poster of the nose cancer screening research study

Do you know that nasopharyngeal cancer, or nose cancer, is one of the most common cancers in adult males?



Who is at risk?

- 35 to 60 years old
- Chinese, Malay or mixed heritage

- Screening for nose cancer detects the cancer early
- Early detection gives an excellent chance of cure

We are conducting a study to screen healthy volunteers for nose cancer.

What will be done?



blood test



saliva test



questionnaire

Further clinical evaluation with a specialist will be arranged if your blood test indicates that you are at high risk of nose cancer.

Interested in signing up?

Scan the QR code to register:

<https://tinyurl.com/NPCscreenSG>



Or contact:

Serene / Judy @ 9111 5561

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Individuals who are 35 to 60 years old of Chinese, Malay or mixed heritage and wish to participate in the NUHS nose cancer screening research study, please register your interest at <https://tinyurl.com/NPCscreenSG>.