

PRESS RELEASE

For immediate release

MALAYSIAN TEAM LEADS ASIAN COMPONENT IN INTERNATIONAL STUDY ON FAULTY GENES THAT CAUSE INCREASED RISK TO BREAST CANCER

Large global study including significant number of Malaysian women, shows not all genes on commercial gene panels are associated with breast cancer risk

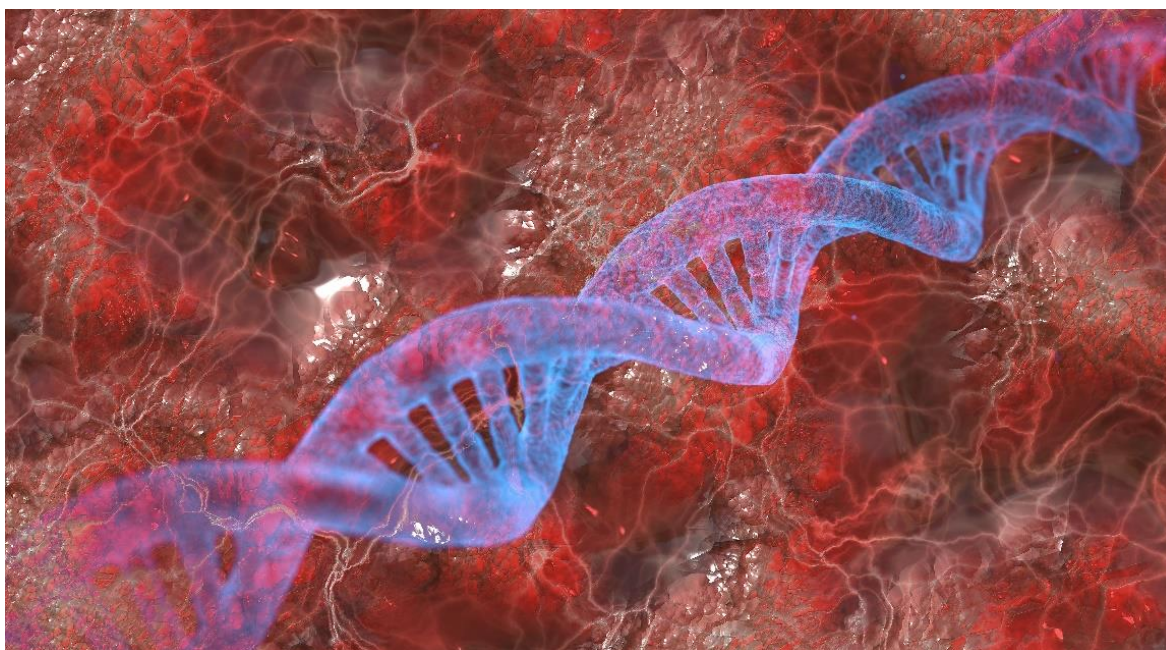


Image source: Pixabay

KUALA LUMPUR – Did you know that there are more than 3 billion alphabets in our genomes and just a single change in some genes like BRCA1 could put you at a higher risk of breast cancer? But which of the 22,000 genes in a human genome are linked to cancer risk, who has these genetic changes and what should you do if you have them?

The University of Cambridge just released the world’s largest study on genes that cause an increased risk to breast cancer, with a significant part of the Asian research led by researchers at Cancer Research Malaysia, Universiti Malaya, Subang Jaya Medical Centre, the University of Nottingham, and 7 hospitals in Singapore.

“It is a huge milestone for cancer research worldwide and in Asia. There are over 113,000 participants from different countries, including a substantial number of Asian women, made possible because of our collaboration with Malaysian and Singaporean hospitals. The sheer sample size of the study provides more accurate estimates for patients to understand their breast cancer risk, as well as suitable prevention options for them and their family,” said Professor Datin Paduka Dr Teo Soo Hwang, OBE, Chief Scientific Officer at Cancer Research Malaysia, who co-led the study.

She explained, “Previously, genetic tests for cancers and other diseases were offered to patients sometimes without any genetic counselling or without a complete understanding of what recommendations to take forward in terms of prevention and screening. Our study is highly important as it analysed the 34 genes commonly found in gene panel tests, narrowing it down to just 12 genes associated with breast cancer risk. We also discovered that Asians are just as likely as Europeans to have these faulty genes, and that faults in these genes also increase the risk of breast cancer in Asian women. However, women from Asia who carry faults in these genes are less likely to develop breast cancer than women in Europe. This means screening and prevention recommendations may need to be tailored differently for Asian women.”

The study called BRIDGES, which stands for Breast Cancer Risk after Diagnostic Gene Sequencing, was published in the prestigious New England Journal of Medicine. Its findings will inform doctors, clinicians and even companies that offer genetic tests, on the set of genes associated with breast cancer risk, to better serve patients and their families.

For Asian women who have a family history of breast or ovarian cancer, like Angelina Jolie, knowing their lifetime risk is lower could mean making different decisions about prevention, in consultation with a specialist.

Professor Easton, Director of the Centre for Cancer Genetic Epidemiology, University of Cambridge, who led the BRIDGES study, said, “Our efforts have focused on finding ways to improve the early detection of cancer, by enabling individuals with inherited risk to cancer to have accurate information about their risk and the screening that is appropriate for them. Much of the research focuses on European populations, where there have traditionally been more resources for medical research. But this type of information may be particularly important in low- and middle-income countries where the funding and infrastructure may not be able to support screening for every woman. We are delighted that through the collaboration with Cancer Research Malaysia, and the funding from the Wellcome Trust and the European Commission, we have been able to widen the research to Asian populations. This research should help to guide appropriate breast cancer screening and clinical management of women in Asian countries.”

Professor Nur Aishah Mohd Taib, Director of the Universiti Malaya Cancer Research Institute, one of the Malaysian investigators in the study said, “Breast cancer patients often ask why they developed breast cancer, and in the past, we were only able to test for 2 genes (BRCA1 and BRCA2) and provide advice to patients if they have inherited these genes. This research extends our understanding of inherited genes and helps doctors like me provide more accurate information to Asian cancer patients.”

Emeritus Professor Dato’ Dr Yip Cheng Har, Consultant Breast Surgeon at Subang Jaya Medical Centre, another Malaysian investigator in the study said, “If you have breast cancer on one side, there’s a 5% chance of getting breast cancer on the opposite side, but if you are BRCA positive, then there is almost a 50% chance of getting breast cancer on the opposite side. More research will be needed to determine whether these additional genes are also associated with increased risk of cancer occurring on the opposite side.”

The Malaysian component of the study is critical for lifesaving early detection, as there currently isn’t enough cancer research being done on Asian genes. This was made possible thanks to the support of research grants and charitable funding from the Wellcome Trust, Yayasan Sime Darby, Yayasan PETRONAS and Estee Lauder Group of Companies.

Read the study: <https://www.nejm.org/doi/full/10.1056/NEJMoa1913948>

- End -

About Cancer Research Malaysia

Cancer Research Malaysia is the only non-profit organisation in Malaysia dedicated to saving lives through impactful research focusing on the Malaysian population and communities across Asia. Our research has already led to the discovery and implementation of new and effective breast cancer prevention strategies and our priority is ensuring that Asians are not left out in the fight against cancer. Together with our partners and supporters, Cancer Research Malaysia's vision is a future free of the fear of cancer. Funding for our lifesaving research depends on donations and sponsorship from the public and corporations. For more information, please visit cancerresearch.my or follow us on [Facebook](#), [LinkedIn](#), [Instagram](#) or [Twitter](#).

For media enquiries, please contact:

Jan Yap (Head of Communications, Cancer Research Malaysia)

T: +603 5650 9797

HP: +6012 200 9469

Email: jan.yap@cancerresearch.my

About the University of Cambridge

The mission of the University of Cambridge is to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence. To date, 109 affiliates of the University have won the Nobel Prize.

Founded in 1209, the University comprises 31 autonomous Colleges, which admit undergraduates and provide small-group tuition, and 150 departments, faculties and institutions. Cambridge is a global university. Its 19,000 student body includes 3,700 international students from 120 countries. Cambridge researchers collaborate with colleagues worldwide, and the University has established larger-scale partnerships in Asia, Africa and America.

The University sits at the heart of the 'Cambridge cluster', which employs 60,000 people and has in excess of £12 billion in turnover generated annually by the 4,700 knowledge-intensive firms in and around the city. The city publishes 341 patents per 100,000 residents.

www.cam.ac.uk

For media enquiries please contact:

Jacqueline Garget

Communications Manager

University of Cambridge

jacqueline.garget@admin.cam.ac.uk

About Universiti Malaya

Situated in the southwest of Kuala Lumpur, Universiti Malaya (UM) is the first university in Malaysia. UM is being supported by two academies, thirteen faculties, three institutes and three academic centres that comprehensively encompass medicine, science, technology, social sciences and humanities. UM also has the first and biggest teaching hospital in Malaysia, which is the University of Malaya Medical Centre (UMMC). The core of UM's contributions to the academia and society is through teaching, research, publication, innovation, and commercialisation.

UM has emerged among the world's top 60 universities and is ranked 59th on the Quacquarelli Symonds (QS) World University Rankings 2021. Since its establishment, UM has successfully produced approximately 200,000 graduates. For more information, please visit www.um.edu.my.

For media enquiries, please contact:
Mastura Mohamad Yusoff
Media Relations Manager
Universiti Malaya
Tel: 03-7967 7009 / 013-3773 207
Email: masturayusoff@um.edu.my

About Subang Jaya Medical Centre

Subang Jaya Medical Centre is the flagship of Ramsay Sime Darby Health Care, a joint venture between Ramsay Health Care, Australia and Sime Darby. It is a licensed 444-bed multi-disciplinary and tertiary care private hospital nestled in the bustling municipality of Subang Jaya, about 30 minutes' drive to Kuala Lumpur city centre and the Kuala Lumpur International Airport via major highways. The Hospital was established in 1985 and for decades, has provided comprehensive and complex care in all specialties. SJMC is also a tertiary referral hospital, receiving local patient referrals from within Malaysia as well as international patients from the Asia-Pacific region, in addition to serving as a major health care provider to a population catchment of an estimated 6.47 million.

About University of Nottingham

The University of Nottingham is a research-intensive university with a proud heritage, consistently ranked among the world's top 100. Studying at the University of Nottingham is a life-changing experience and we pride ourselves on unlocking the potential of our students. We have a pioneering spirit, expressed in the vision of our founder Sir Jesse Boot, which has seen us lead the way in establishing campuses in China and Malaysia - part of a globally connected network of education, research and industrial engagement. The University's state-of-the-art facilities and inclusive and disability sport provision is reflected in its status as The Times and Sunday Times Good University Guide 2021 Sports University of the Year. We are ranked eighth for research power in the UK according to REF 2014. We have six beacons of research excellence helping to transform lives and change the world; we are also a major employer and industry partner - locally and globally. Alongside Nottingham Trent University, we lead the Universities for Nottingham initiative, a pioneering collaboration which brings together the combined strength and civic missions of Nottingham's two world-class universities and is working with local communities and partners to aid recovery and renewal following the COVID-19 pandemic.

For media enquiries please contact:
Josephine Dionisappu,
PR and Communications Manager
University of Nottingham Malaysia
josephine.dionisappu@nottingham.edu.my