

A NCCS QUARTERLY PUBLICATION
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COLUMN TO ACHIEVE GOOD HEALTH



SO MUCH TO LOOK FORWARD TO IN LIFE...
EVEN AFTER CANCER!



BREAST CANCER AND GENETICS

BY DR JOANNE NGEOW & LI SHAO-TZU

In this issue of *Salubris*, we take a deeper look at breast cancer in the areas of genetics. Around 10-25% of breast cancers are thought to be hereditary. We learn more about Cancer Genetics in a nutshell with **Ms Li Shao-Tzu**, Genetic Counsellor at NCCS and **Dr Joanne Ngeow**, Senior Consultant Medical Oncologist at NCCS and Head of the Cancer Genetics Service.



STARTING OFF EASY – LET'S TALK ABOUT GENES

Genes are instruction manuals for our bodies. Deoxyribonucleic Acid or DNA for short is the basic unit of genes that carries genetic instructions used for the functioning of all living organisms and viruses too. Each gene contains a particular set of instructions and influences different things, from the colour of our eyes or hair, to the most complex of things such as risk for specific diseases.

HEREDITARY CANCER

Cancers are common disease, most of the time, they happened by chance, because of many factors. But a small part of cancers (5%-10%) can be linked to a hereditary condition which runs in the family. It happens when a change (mutation) in a gene is passed down from one generation to the next. There are some changes in some genes that increase the risk of getting cancer. Individuals born with a gene mutation may or may not develop cancer, but their risk of cancer may be greater. That is why hereditary cancer is seen at younger ages and more often in some families. That being said, the important and reassuring news is that most families do not have hereditary cancer.

MISBEHAVING GENES

Hereditary Breast and Ovarian Cancer (HBOC) Syndrome is an adultonset, cancer predisposition syndrome which can be passed down through generations. HBOC increases the risk of developing breast and ovarian cancers in women, prostate cancer in men and other cancers such as pancreatic and melanoma.

So what causes HBOC? Genetic mutations in BRCA1 or BRCA2 genes is the most common cause. BRCA1 and BRCA2 are genes that produce tumour suppressor proteins and help repair damaged DNA. Think of it like your body's repairman. However, when either of these genes is mutated, they either stop producing these tumour suppressor proteins or don't function properly. Because of this, cells are more likely to have DNA damages that not repaired correctly and can lead to cancer.

Individuals with BRCA1 or BRCA2 mutations tend to develop cancer at an earlier age than the general population. These individuals also have a higher risk for cancer recurrence and bilateral breast cancer (a second primary tumour in a different tissue).

FINDING THE "ROOT" OF THE PROBLEM

The history of cancer in your close relatives is a clue about the chance of HBOC syndrome in your family. HBOC syndrome is more likely if one or more of the following features can be confirmed in the family:

- A young woman (age <50) with breast cancer.
- A woman with ovarian/fallopian/peritoneal cancer.
- A woman (age <60) with triple negative breast cancer.
- A woman with two or more separate breast cancers.
- A woman with both breast and ovarian cancer.
- A man with breast cancer.
- Strong family history of breast cancer or ovarian cancer or pancreatic cancer or prostate cancer on the same side of the family.

Genetic counselling is a process to understand and to evaluate a family's risk of any inherited medical condition. It also helps patients and their families to understand the inherited condition, the impacts of genetic testing and reach the decision of what to do next.



THE FINAL SAY

The research into cancer and genetics has taken us many steps closer to understanding how cancer works. Only a small number of cancers are hereditary. However, it is important to distinguish between the hereditary and sporadic cases as it helps to identify individuals and families at increased risk of cancer. Knowing this information allows at-risk individuals to have options for early detection, appropriate cancer management and possible risk reduction measures.

If you want to find out more, you can review your family's history of cancer with your doctor. Alternatively, you can visit the Cancer Genetics Service webpage at www.nccs.com.sg/PatientCare/CancerGeneticsService.

You can also speak to our dedicated Nurse Educators through the Cancer Education and Information Service at 6225 5655 or through cancerhelpline@nccs.com.sg.

HOW IS HBOC DIAGNOSED?

A diagnosis of HBOC is made following genetic testing in an individual or family with a germline BRCA1 or BRCA2 pathogenic mutation. Genetic information is complex, thus, it does not take place without genetic counselling and the process of informed consent.

Genetic counselling is a process to understand and to evaluate a family's risk of any inherited medical condition. It also helps patients and their families to understand the inherited condition, the impacts of genetic testing and reach the decision of what to do next.

PREVENTION AND SCREENING

Women who test positive for BRCA1 and BRCA2 may choose to either start screening at a younger age, or consider more frequent screening (clinical breast exam, mammogram and breast MRI). Risk reducing interventions such as chemoprevention and preventive mastectomy or oophorectomy are recommended and may be considered.

Making a decision isn't that simple. While genetic testing can help you better understand the risk of developing cancer or passing it on to your children, there are several things to consider before you make a decision to go for genetic testing. Understandably, cancer is difficult to talk about. Before you make any decision, it's important that you should talk and decide in collaboration with your family, doctor and genetic counsellor.

Going for genetic testing may:

- Affect your medical decisions related to surgery, medication and future screening.
- Experience different emotions, such as relief, hope, confusion, worry, guilt or anxiety.
- The result may be more than just a "yes" or "no".
- The result may affect your family.
- The result may affect your health insurance.

ABOUT CANCER GENETICS SERVICE AT NCCS

The Cancer Genetics Service (CGS) at NCCS carries a full suite of genetic medicine services, ranging from genetics to adult-onset disorders. The CGS is staffed by medical oncologists and genetic counsellors with advanced specialisation in cancer genetics.

About Dr Joanne Ngeow

Dr Joanne Ngeow is a Senior Consultant in the Division of Medical Oncology, NCCS, and currently heads the Cancer Genetics Service (CGS). She has an academic interest and runs a translational research laboratory understanding why certain patients and families are at risk of hereditary cancer syndromes and how we can best use that understanding to help manage patients better.

About Ms Li Shao-Tzu

Ms Li Shao-Tzu is a Certified Genetic Counsellor in the Cancer Genetics Service. She has a Masters of Science in Genetic Counselling and Masters of Science in Clinical Laboratory Science and Medical Technology. She is interested in helping patients to understand more about genetics and how it can impact their healthcare. She hopes to provide the ongoing support of sharing the genetic knowledge that will benefit everyone.

FAST FACTS – YOUR INTRODUCTION TO LUNG CANCER

BY DR NG QUAN SING

Lung cancer is a unique disease. Lung cancer is one of the most preventable cancers. Yet somehow, lung cancer rates in Singapore remain high. We clear the air with some fast facts about lung cancer with our expert, **Dr Ng Quan Sing**.

Dr Ng Quan Sing is a Senior Consultant Medical Oncologist at the National Cancer Centre Singapore. Dr Ng specialises in genitourinary, thoracic, head & neck and nasopharyngeal cancers. He is a clinician scientist and was awarded the Cancer Research UK research fellowship as well as the British Oncological Association Young Investigator Award for his work. Dr Ng is a clinical senior lecturer at the Yong Loo Lin School of Medicine, National University of Singapore, as well as research mentor to Duke-NUS graduate medical students.

WHAT IS LUNG CANCER?

Lung cancer refers to the uncontrolled growth of abnormal cells which come from the lungs, usually from the cells that line the air passages or the bronchi. The abnormal cells do not carry out the function of normal lung cells. As these abnormal cells grow, they can get bigger and start to interfere with the normal functioning of the lung. They can spread from the original part of the lung to other parts of the body, such as the opposite lung, our lymph nodes, bones, liver etc.

CAUSES AND RISKS

Cigarette smoking is the main cause of lung cancer. This also includes pipe, cigar and marijuana smoking. The risk of lung cancer developing in a smoker is 15-25 times more than for a non-smoker.

Breathing in the smoke of others (called second hand smoke) can increase the risk of developing lung cancer by about 30%. The risk to children of smokers is not yet accurately quantified.

Exposure to certain workplace chemicals such as asbestos, coal gas, chromium, nickel, arsenic, vinyl chloride, and mustard gas may also increase the risk of lung cancer.

Despite the strong association of smoking with lung cancer, it has also been recognised that more than one-quarter of lung cancer cases in Singapore occur in people who have never smoked, and who do not have prior smoke exposure.

Lung cancer can be cured in the early stages, and even in the later stage, there is hope for long term survival in the form of new chemotherapy drugs, targeted therapies and immunotherapy.



SYMPTOMS

Often, there may be no symptoms of lung cancer, particularly when it is at an early stage.

HOWEVER, COMMON SYMPTOMS OF LUNG CANCER INCLUDE:

- A persistent cough that does not go away or gets worse.
- Blood in sputum (phlegm from lower airway).
- Increasing breathlessness.
- Pain in the chest that may be worsened with deep breathing or coughing.
- A change in the voice/ development of a persistent hoarse voice.
- Recurrent infection in the lungs.
- Loss of appetite and/or unexplained weight loss and fatigue.
- A lump or swelling in the neck (which is due to cancer that has spread to the lymph nodes of the neck).
- Bone pain, or headache or weakness of the arms or legs (which may be due to the lung cancer spreading to other parts of the body, such as the bones or the brain).

WHY SHOULD I BE AWARE OF LUNG CANCER?

Lung cancer is the 2nd most common cancer affecting men and 3rd in women. Lung cancer is also the number 1 cancer killer for men and number 2 for women.*



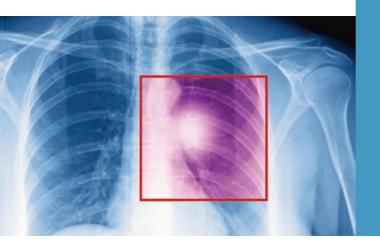
TYPES OF LUNG CANCER

Lung cancer can be segregated into two main types – Small cell lung cancer and non-small cell lung cancer.

Non-small cell lung cancer (NSCLC) is the most common form of lung cancer. There are different types of NSCLC tumours, and adenocarcinoma, and squamous cell carcinoma are the most common types.

Adenocarcinoma lung cancer starts in the cells that would make mucus. This particular type of lung cancer can be found in both smokers and non-smokers.

Squamous cell carcinoma is the cancer that begins in the squamous cells in the lungs. Squamous cells are a kind of epithelial cell that lines the inside of the airways in the lungs. It is more strongly associated with smoking than adenocarcinoma lung cancer. Small cell lung cancer makes up about 10-15% of lung cancer. This cancer type is usually caused by smoking. One thing to note is that small cell lung cancer tends to grow and spread quickly to other organs such as the brain, bones or liver.



PROGNOSIS AND TREATMENT

Lung cancer can be cured if detected early. When cancer has spread, the cancer cannot be cured but there are many effective treatments available that can control the cancer, prolong life, while maintaining quality of life.

Up to now, there are still no effective methods to screen for lung cancer. Low dose computed tomography (LDCT) scans have been shown to be a sensitive method of picking up lung cancer in people with high risk of lung cancer (smokers and ex-heavy smokers). However, this can lead to over-diagnosis (diagnosis of cancer that would never be life-threatening) and false-positive results, where the scan results are positive but the patient does not have lung cancer. Therefore the best treatment is still prevention – by not smoking, or stop smoking.

Treatment options differ from person to person. It may include surgery, radiation therapy, chemotherapy, biological therapy and immunotherapy. For patients with lung cancer that is detected early, surgery by trained surgical oncologists is often needed to remove the tumour. This is often followed by chemotherapy, which is the use of chemical substances or drugs to kill cancer cells. Radiotherapy, which uses high energy X-rays, is also a very effective treatment for treating lung cancer that has not spread to other parts of the body. This is often given in combination with chemotherapy. For lung cancer that has already spread beyond the lung, chemotherapy is the most common treatment. For patients whose lung cancer have certain genetic mutations, biological therapy using drugs to target these specific mutations, are very effective in controlling the cancer. Recently, immunotherapy, which harnesses the patient's own immune system to fight cancer, has also been shown to benefit certain patients with lung cancer.

A FINAL WORD FROM OUR EXPERT

Lung cancer is a unique disease. It can be prevented. If you're currently a smoker, I would like to encourage you to quit smoking. Not smoking or quitting smoking will greatly help in lung cancer prevention. Quitting smoking may not be easy. Find support through family or friends who can help encourage and support your journey. Alternatively, there are also confidential advisory services such as Quitline, where you can contact through toll-free phone, SMS or email.

Lung cancer is almost always treatable. The diagnosis of cancer will come as a shock to everyone but remember to stay positive. Treatment of lung cancer has improved greatly over the years. Your oncologist will help you by offering personalised treatment depending on the type of lung cancer and the stage of the cancer. Lung cancer can be cured in the early stages, and even in the later stage, there is hope for long term survival in the form of new chemotherapy drugs, targeted therapies and immunotherapy.

Have more questions about lung cancer? Or have questions about any type of cancer in general? We encourage you to talk to our Nurse Educators from the Cancer Education and Information Service (CEIS) at **6225** 5655 or email your questions to **cancerhelpline@nccs.com.sg**.

^{*}Statistics from Singapore Cancer Registry, Interim Annual Report (Trends in Cancer Incidence in Singapore 2010-2014)

NCCS & AIN SOCIETY: A YEAR LATER AND STILL GOING STRONG

BY SITI ZAWIYAH

Corporate Communications

In 2015, the National Cancer Centre Singapore (NCCS) partnered Ain Society, and initiated a community-based project to reach out to the masses to promote anti-cancer advocacy.



The Cancer Education Bus – the first in Singapore, was designed and retrofitted with various cancer information panels and TV screens. Since its launch in June 2015, the bus has served as a mobile exhibition to reach out to the community and create awareness on cancer in a fun and interactive way, giving NCCS the additional mileage in its outreach programme to educate the public on the various types of cancer, signs and symptoms, screening recommendations and ways to reduce cancer risks.

With a partial sponsorship from NTUC Fairprice Foundation, Ain Society purchased the bus at a cost of \$120,000. Retrofitting was made possible with a \$112,000 grant from the Community Cancer Fund.

To date, the bus has opened its doors to over 16,000 participants at the heartlands, schools and workplaces. With the strong partnership between NCCS and Ain Society, the Cancer Education Bus will continue to travel across the island to create cancer awareness and disseminate cancer information.

Join us in the fight against cancer: If you are interested to have the Cancer Education Bus at your event, please contact us at **6225 5655** or email to **hope@nccs.com.sg**.















ABOUT AIN SOCIETY

Ain Society, a voluntary welfare organisation with an IPC status, is registered with the Registrar of Society. One of its focus is to help families with cancerstricken members by providing financial, mental and emotional support, in hopes to ease their burden as they go through a very trying period.

Since its inception in 2000, Ain Society has benefited more than 25,000 individuals through its developmental, remedial as well as rehabilitative programmes. In 2013, Serenity Social Service Centre was set up with the focus on helping those who have been afflicted with cancer. The centre provides an avenue of solace to those affected, through emotional, spiritual and psycho-social assistance.

Ain Society partners external agencies to share resources and expertise to empower the community through education. The centre acts as a drop-in cancer centre where the community can seek information and assistance pertaining to cancer.

Ain Society is also an advocate for active aging, engaging the elderly residing in the vicinity of their centre in Eunos Crescent in various programmes designed to keep them mentally and socially healthy.



Ain Society's Board of Management

Ain Society takes a multi-disciplinary approach in the fight against cancer. It provides support to those affected through programmes and services such as:

- Counselling
- Grief and Bereavement Support
- Psycho-social Support group
- Re-integrative workshops for survivors
- Caregivers Training & Support
- Free Tuition for children: Ain Society's team of qualified and experienced counsellors provides in-depth support and assistance to the whole family, in coping with the dreaded illness.
- Financial Aid: Ain Society provides financial assistance for needy families whose member/s is battling cancer. This is especially critical when he/she is the breadwinner who has fallen ill.
- Public Education Workshops & Seminars: To combat the high incidence rate, Ain Society's team regularly conducts health talks and seminars by reputable guest speakers, to create greater awareness on cancer and its preventive measures, and to educate the public about living healthier lifestyle.
- Therapeutic Arts/Music Play: Through musical and art therapy, our clients learn to express themselves through music and art.

MAKING WAVES – ROW FOR HOPE 2016 EVENT RECAP

BY ALSON TAN

Corporate Communications

An exciting day of festivities and boat racing at the inaugural Row for Hope 2016.

A cool and pleasant morning was the perfect setting for some boat racing action at the inaugural Row for Hope. The event was held on 27th August 2016 against the beautiful backdrop of Gardens By The Bay East.

Row for Hope was inspired by the annual boat race on the River Thames between Oxford and Cambridge. Set in Singapore's own Marina Bay, NCCS and the Oxford and Cambridge Society of Singapore (Oxbridge Singapore) came together to raise funds for the NCCS Community Cancer Fund. Joining the festivities were Team ASBO (Any School But Oxbridge) and the Pink Spartans, a dragon boat team for cancer survivors and supporters. The races were a 1km sprint which started in the vicinity of the Singapore Indoor Stadium and ended just past the Benjamin Sheares Bridge.

Adding to the carnival atmosphere, NCCS' Cancer Education Bus made an appearance to spread the cancer prevention message to attendees. In between races, spectators were entertained by a dance performance from Tapxedo Junction and song performances by medical students from the Yong Yoo Lin School of Medicine, NUS and Duke-NUS School of Medicine.

NCCS Director, Prof Soo Khee Chee reflected on celebrating life and the complementing partnership between NCCS and Oxbridge Singapore: "One community has tremendous potential to do good, while the other community is looking for others to help out with an onerous task."

As the races began, you could sense the fierce undertone of friendly rivalry as supporters cheered zealously along the side-lines. Of note, Team ASBO narrowly edged Team Oxbridge in a particularly exciting race. The Pink Spartans supporters and survivors' race was an absolute thriller and a nail biting photo-finish, which left spectators dizzy with excitement before the announcement of the race winner – a hard fought win by the cancer survivors.







Race results were largely dominated by Cambridge after some great performances from their rowers. The final men's race was a tense finish, as teams were neck and neck, with Cambridge narrowly edging Oxford in the final mad dash toward the finish line.

The thrilling event raised more than \$65,000 for the Community Cancer Fund. "We are delighted, as a society of privileged Oxbridge alumni, to have an opportunity to put back into our community. This collaboration with NCCS allows us to infuse the celebration of an annual Oxbridge tradition with a meaningful purpose," said Dato Paul Supramaniam, President of Oxbridge Singapore.







This initiative of unifying sports and the cause of fighting cancer demonstrates strength in adversity, which I hope will inspire more people to join in and support this worthy cause.

Guest of Honour and International Olympic Committee board member, Mr Ng Ser Miang















Guest of Honour and International Olympic Committee board member, Mr Ng Ser Miang was all smiles as he summed up the day: "This initiative of unifying sports and the cause of fighting cancer demonstrates strength in adversity, which I hope will inspire more people to join in and support this worthy cause."

The thrill of the race, the carnival atmosphere and the great cause made Row For Hope 2016 a hugely enjoyable, feel good event. As tradition dictates, runners up Oxford issued the challenge to Cambridge for next year. We can't wait to see what next year has in store at Row for Hope 2017!

NCCS would like to thank the following partners for their generous donations and sponsorships:

Event Sponsors: Lim Kim Tah Holdings Ltd, Tessa Therapeutics Pte Ltd, The Oxford and Cambridge Society of Singapore

Official Venue Sponsor: Passion Wave @ Marina Bay

Official Drink Sponsor: VITA Coco

Official Cultured Milk Sponsor: Vitagen Less Sugar

Online and Cheque Donations from: The Oxford and Cambridge Society of Singapore, BNY Mellon and NCCS Community

TAKING HOME THE ANTI-CANCER MESSAGE

BY ALICIA PANG

Cancer Education & Information Service

Wellness is not only in the doing, it is also in the being. What better way to improve our holistic wellness than to learn more about different conditions and adopting a healthier lifestyle?

As the national cancer centre, the National Cancer Centre Singapore (NCCS) believes in empowering the public with the knowledge to help them to live a healthy life, and to share cancer information with others through ongoing cancer education.

One of NCCS' initiatives to lead and promote anti-cancer advocacy is to conduct health talks on general cancer awareness and tumour specific talks, in both English and Mandarin. You may have seen our health educators and specialists in action, providing these talks at communal meeting areas or in organisations. These sessions are prearranged in collaboration with companies, community centres, faith-based organisations or voluntary welfare organisations to spread the anticancer message in the heartlands. This is done to encourage the public to take charge of their health and to continue to adopt a healthy lifestyle.

For 45 minutes, participants can look forward to learning about, and discussing the basics of cancer, get a glimpse of cancer statistics in Singapore, living healthily through diet and exercise and also the resources to cancer screening programmes during the interactive session.

The health talk provides a platform for participants to have the confidence to clarify their doubts during the Questions and Answers session in a safe and closed environment. Our NCCS specialists are also happy to spend a little time to take questions privately after each health talk.

If participants have questions that they would like to ask privately, they can call the Cancer Helpline or email to **cancerhelpline@nccs.com.sg** to clear the doubts that are clouding their minds.

These health talks are available upon request. Call the Cancer Helpline at **6225 5655** or email to **hope@nccs.com.sg** for more information.



Mandarin Health Talk at Kampong-Chai Chee Community Club



English Health Talk at Cheng San Public Library 于静山公共图书馆内主办的健康讲座

Be CAUTIOUS of the Signs of Cancer 谨防癌症的警告讯号

- 1. <u>Change in normal bowel and micturition habits</u> 排便与排尿习惯有所改变
- 2. A sore which refuses to heal 溃疡经久不愈
- 3. <u>U</u>nusual bleeding or discharge 异常出血或排出异常分泌物
- 4. Thickening or lump in the breast or elsewhere 乳房或身体其他部位长肿块或增厚
- 5. <u>Increasing pain in body for no apparent reason</u> 身体的疼痛无故增加
- 6. Obvious change in mole or wart 痣或疣出现变异
- 7. <u>U</u>nusual prolonged cough or hoarseness 持续声音沙哑或咳嗽
- 8. <u>S</u>wallowing difficulty or persistent indigestion 持续消化不良或吞咽有困难



于甘榜菜市民众联络所主办的华语健康讲座



English Health Talk at Keppel Offshore & Marine Limited 于吉宝岸外与海事公司主办的英语健康讲座

The CAUTIOUS Signs of Cancer

谨防癌症的警 告讯号

把防癌信息带回家

彭薇洳 执行人员 癌症教育与资讯服务

健康的生活不仅是在于做运动而已, 这重要的概念也应该停留在我们的心里。 毋庸置疑,要提高我们的整体健康生活 素质,最好的办法就是加强我们对不同疾 病的认识和健康生活方式的了解。

作为癌症治疗与研究中心,新加坡国立癌症中心深信,通过持续教育把健康生活贴士和癌症知识传达给公众是帮助大家保持健康的最佳途径。

通过中英讲座提升公众对一般癌症的常识是国立癌症中心推 广防癌意识的主要倡议之一,旨在鼓励公众注意自己的健康、 维持良好的生活习惯。私人企业、民众聚乐部、宗教组织和志 愿团体都是我们的合作伙伴。您可能也曾在公共场所或工作机 构里参与过我们的讲座,并且从我们的专科护士与医生的分享 中获得了有益的知识。

在这为时45分钟的公共讲座里,公众可以学习到与癌症相关的基本资讯,如癌症的征兆与症状、新加坡的癌症数据、以及如何通过健康饮食和运动保持身体健康等。通过与讲员的互动,公众也可以在讲座上了解更多有关本地癌症筛检计划的详情。

公众也可提出任何有关癌症的问题,解答心中的疑问。如果您不想公开发问,公众也可致电 6225 5655 或电邮 cancerhelpline@nccs.com.sg。

若您希望邀请国立癌症中心主办这类讲座,可以致电癌症援助 热线 (6225 5655) 或电邮致 hope@nccs.com.sg 与我们 联络。

FEARLESS FASHION – THE PINK RIBBON FASHION SHOW AND CARNIVAL

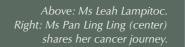
BY ALSON TAN
Corporate Communications

PHOTOGRAPHS BY STANLEY CHEE

"In the beginning, when my oncologist said that I will lose my hair, my caregiver told me to shave it off rather than feeling depressed watching myself lose my hair slowly".

Ms Leah Lampitoc, a 40 year old Interior Designer, recounts her personal experience. Initially reluctant, Leah wondered what it would be like to be bald. As far as she could remember, she had nice, well maintained, long hair. Leah shares a thought to encourage others who may share a similar experience: "Being bald doesn't make me less as a person. I have to embrace it like how I embrace life".













Ms Leah Lampitoc was a participant in The Pink Ribbon Fashion Show & Carnival held, on 15th October 2016. Breast cancer patients, survivors, NCCS staff and doctors were heating up the city in haute couture and hot pink. The Pink Ribbon Fashion Show and Carnival was co-organised by National Cancer Centre Singapore and Singapore Fashion Runway. The event was in conjunction with Breast Cancer Awareness month, raising awareness and educating the public.

Setting the tone for a buzzing carnival atmosphere, the Pink Ribbon Fashion Show and Carnival opened with a vibrant and heart pumping Zumba workout. Adding to the electric atmosphere were performances by upcoming local band 2-4-6, who delivered excellent renditions of songs with a message of positivity and encouragement. The public was also treated to a variety of activities ranging from educational booths about breast cancer, snack booths, a photo booth, balloon sculptors and goodie bags. Special guest for the evening, TV actress Pan Ling Ling, together with other cancer survivors, took the stage in a special segment to share their personal cancer journeys, challenges and triumphs.

This unique fashion extravaganza brought together breast cancer patients, survivors, medical specialists and staff to deliver a message of fearlessness. The 20 Pink Ribbon models trained for over two months prior to the event, learning to design and sew their outfits. The ladies showcased 20 unique and wonderful creations – 20 outfits designed for celebrations or for a casual day out. The participants were skilfully guided by the expert hands of Ms Eileen Yap from Singapore Fashion Runway.

The collective effort was to drive home a very special message. The participants hope to encourage other ladies to shed their fear – whether it be fears about screening, the journey or the future – by showing their fearless spirit in the lights of the fashion runway. "Being in the Pink Ribbon fashion show allows us to share with the whole world how we fought the biggest battle in our lives. You'll see a fearless, fighting spirit from within us to show greatness in ourselves", said Leah. "We will continue to share our stories with people about how we surpassed challenges that would have otherwise destroyed our inner strength".









Topmost: Matching outfits and the finale walk. Above: Thanks to aspiring band 2-4-6 for their wonderful performance.



From far left:
Performance
by NCCS Clinic E
staff; behind the
scenes make up;
a casual moment
backstage with
our young
models.

In the face of great challenges, these ladies have shown the courage and determination to overcome. Shedding our personal fears isn't easy, whether it be fears about getting screened, our health, our personal journeys or even the future. But just like the amazing ladies on the fashion runway, perhaps we can learn the same fearless, fighting spirit.









At the carnival (clockwise from upper left): Teaching participants about self breast exam; cupcakes booth by a patient; our wonderful partners and volunteers; an activity booth.





Above: Lighthearted moments at the carnival (left); guests enjoying a selfie (right).

> Right: Balloon art never fails to delight.







Together in the fight against breast cancer.





3.5KM AND 10KM

19TH FEB 2017, SUN, 7.15AM
BAYFRONT EVENT SPACE (BAYFRONT MRT)

SIGN UP/ DONATE AT

www.RUNFORHOPE.sg

	Rates
Adult	\$55
PAssion Card Member* / Past Participant	\$50
Junior / Youth	\$32
Buddies (2 Pax)	\$48
Group (20 pax & above)**	\$45

Ages 4 and below have free entry.

Above registration fee is for 1 pax.

*Enter your 16-digit PAssion Card or PAssion POSB Debit Card number in the Promo Code field upon registration to enjoy the special rate.

**Email to enquiry@runforhope.sg for Group Registration Promo Code









Run Organiser



OUTREACH – PUBLIC FORUMS, CANCERWISE WORKSHOP, UPCOMING EVENT FOR THE GENERAL PUBLIC



Role of Diet & Supplements in Cancer Care

TOPICS:

- Influencing cancer risk through
- Diet
- Supplements

Public Forum

Date, Time, Venue

7 January 2017, Saturday

MANDARIN SESSION

Time: 9.15am to 10.30am (Registration: 08.45am to 9.15am)

ENGLISH SESSION

Time: 11.15am to 12.30pm (Registration: 10.45am to 11.15am)

National Cancer Centre Singapore Peter & Mary Fu Auditorium, Level 4

11 Hospital Drive Singapore 169610

Registration

Free Admission

Strictly no admission for children below 12 years old.

Registration is a MUST as seats are limited.

PHONE REGISTRATION ONLY

Open for registration

Please call: 6225 5655 Monday – Friday:

8.30am to 5.30pm

Register early to avoid disappointment!

The information is correct at Press time. NCCS reserves the right to change programmes or speaker without prior notice.

SEMINARS / FORUMS / TUMOUR BOARDS / **SMC-CME ACTIVITIES** FOR MEDICAL PROFESSIONALS ONLY

NOVEMBER 2016				
Date	Time	Event Information	CME Pt	Registration Contact
3, 10, 17, 24	11.30am	Lung Tumour Board Combine SGH-NCCS Meeting @ SGH Blk 2 Level 1, Radiology Conference Room	1	Christina Lee Siok Cheng 6326 6095 christina.lee.s.c@nhc.com.sg
3	5.00pm	NCCS-SGH Joint Lymphoma Workgroup Meeting @ NCCS Level 2, Clinic C, Discussion Room	1	Carol Tang 6436 8539 carol.tang.w.c@nccs.com.sg
2, 9, 16, 23, 30 2, 9, 16, 23, 30 4, 11, 18, 25 7, 14, 21, 28	4.30pm 5.00pm 4.30pm 5.00pm	NCCS Tumour Board Meetings: Sarcoma Tumour Board Meeting Surgical Oncology Tumour Board Meeting Breast Tumour Board Meeting Head & Neck Tumour Board Meeting @ NCCS Level 2, Clinic C, Discussion Room	1 1 1 1	Lim Shufen / Ella 6436 8723 / 6436 8294 dsolsf@nccs.com.sg / Nursuhaila.rahmat@nccs.com.sg Lalitha / Nora 6436 8236 / 6576 2037 lalitha.krishnan@singhealth.com.s noralina.ali@singhealth.com.sg Angela 6576 1731 angela.liew.m.f@singhealth.com.s
2, 9, 16, 23, 30	1.00pm	Gynae-Oncology Tumour Board Meeting @ NCCS Level 1, Clinic A, Discussion Room	1	Lim Shufen / Ella 6436 8723 / 6436 8294 dsolsf@nccs.com.sg / Nursuhaila.rahmat@nccs.com.sg
2, 9, 16, 23, 30	1.00pm	S'Health Hepato-Pancreato-Biliary Tumour Board ® NCCS Level 4, Peter & Mary Fu Auditorium	1	Saratha / Carol 6436 8165 / 6436 8539 saratha.v.gopal@nccs.com.sg / carol.tang.w.c@nccs.com.sg
25	5.00pm	NCCS Neuro Onco Tumour Board Meeting Academia, Diagnostic Tower, Level 9 Histopathology Microscopy Teaching Room	1	Saratha / Ang Hui Lan 6436 8165 / 6436 8174 saratha.v.gopal@nccs.com.sg / dmoahl@nccs.com.sg
24	7.30am	Endocrine and Rare Tumour Meeting @ NCCS Level 2, Clinic C, Discussion Room	1	Saratha 6436 8165 saratha.v.gopal@nccs.com.sg
3, 10,17, 24	12.00pm	Upper GI Tumour Board Meeting @ NCCS Level 4, Peter & Mary Fu Auditorium	1	Carol Tang / Ang Hui Lan 6436 8539 / 6436 8174 carol.tang.w.c@nccs.com.sg / dmoahl@nccs.com.sg

SEMINARS / FORUMS / TUMOUR BOARDS / SMC-CME ACTIVITIES FOR MEDICAL PROFESSIONALS ONLY

DECEMBI	ER 2016			
Date	Time	Event Information	CME Pt	Registration Contact
1, 8, 15, 22, 29	11.30am	Lung Tumour Board Combine SGH-NCCS Meeting @ SGH Blk 2 Level 1, Radiology Conference Room	1	Christina Lee Siok Cheng 6326 6095 christina.lee.s.c@nhc.com.sg
1	5.00pm	NCCS-SGH Joint Lymphoma Workgroup Meeting @ NCCS Level 2, Clinic C, Discussion Room	1	Carol Tang 6436 8539 carol.tang.w.c@nccs.com.sg
7, 14, 21, 28 7, 14, 21, 28 2, 9, 16, 23, 30 5, 12, 19, 26	4.30pm 5.00pm 4.30pm 5.00pm	NCCS Tumour Board Meetings: Sarcoma Tumour Board Meeting Surgical Oncology Tumour Board Meeting Breast Tumour Board Meeting Head & Neck Tumour Board Meeting @ NCCS Level 2, Clinic C, Discussion Room	1 1 1 1	Lim Shufen / Ella 6436 8723 / 6436 8294 dsolsf@nccs.com.sg / Nursuhaila.rahmat@nccs.com.sg Lalitha / Nora 6436 8236 / 6576 2037 lalitha.krishnan@singhealth.com.sg / noralina.ali@singhealth.com.sg Angela 6576 1731 angela.liew.m.f@singhealth.com.sg
7, 14, 21, 28	1.00 pm	Gynae-Oncology Tumour Board Meeting @ NCCS Level 1, Clinic A, Discussion Room	1	Lim Shufen / Ella 6436 8283 / 6436 8294 dsolsf@nccs.com.sg / Nursuhaila.rahmat@nccs.com.sg
7, 14, 21, 28	1.00 pm	S'Health Hepato-Pancreato-Biliary Tumour Board @ NCCS Level 4, Peter & Mary Fu Auditorium	1	Saratha / Carol 6436 8165 / 6436 8539 saratha.v.gpoal@nccs.com.sg / carol.tang.w.c@nccs.com.sg
30	5.00 pm	NCCS Neuro Onco Tumour Board Meeting Academia, Diagnostic Tower, Level 9 Histopathology Microscopy Teaching Room	1	Saratha / Ang Hui Lan 6436 8165 / 6436 8174 saratha.v.gopal@nccs.com.sg / dmoahl@nccs.com.sg
29	7.30 am	Endocrine and Rare Tumour Meeting @ NCCS Level 2, Clinic C, Discussion Room	1	Saratha 6436 8165 saratha.v.gopal@nccs.com.sg
1, 8, 15, 22, 29	12.00 pm	Upper GI Tumour Board Meeting @ NCCS Level 4, Peter & Mary Fu Auditorium	1	Carol Tang / Ang Hui Lan 6436 8539 / 6436 8174 carol.tang.w.c@nccs.com.sg / dmoahl@nccs.com.sg

SEMINARS / FORUMS / TUMOUR BOARDS / SMC-CME ACTIVITIES FOR MEDICAL PROFESSIONALS ONLY

JANUAR	RY 2017			
Date	Time	Event Information	CME Pt	Registration Contact
4, 11, 18, 25	1.00pm	S'Health Hepato-Pancreato-Biliary Tumour Board © NCCS Level 4, Peter & Mary Fu Auditorium	1	Saratha / Carol 6436 8165 / 6436 8539 saratha.v.gopal@nccs.com.sg / carol.tang.w.c@nccs.com.sg
4, 11, 18, 25	1.00pm	Gynae-Oncology Tumour Board Meeting @ NCCS Level 1, Clinic A, Discussion Room	1	Lim Shufen / Ella 6436 8723 / 6436 8294 dsolsf@nccs.com.sg / Nursuhaila.rahmat@nccs.com.sg
4, 11, 18, 25 4, 11, 18, 25 6, 13, 20, 27 9, 16, 23	4.30pm 5.00pm 4.30pm 5.00pm	NCCS Tumour Board Meetings: Sarcoma Tumour Board Meeting Surgical Oncology Tumour Board Meeting Breast Tumour Board Meeting Head & Neck Tumour Board Meeting @ NCCS Level 2, Clinic C, Discussion Room	1 1 1 1	Lim Shufen / Ella 6436 8723 / 6436 8294 dsolsf@nccs.com.sg / Nursuhaila.rahmat@nccs.com.sg Lalitha / Nora 6436 8236 / 6576 2037 lalitha.krishnan@singhealth.com.sg noralina.ali@singhealth.com.sg Angela Liew 6576 1731 angela.liew.m.f@singhealth.com.sg
5, 12, 19, 26	11.30am	Lung Tumour Board Combine SGH-NCCS Meeting @ SGH Blk 2 Level 1, Radiology Conference Room	1	Christina Lee Siok Cheng 6326 6095 christina.lee.s.c@nhc.com.sg
5	5.00pm	NCCS-SGH Joint Lymphoma Workgroup Meeting @ NCCS Level 2, Clinic C, Discussion Room	1	Nurul Amirah 6436 8720 nurul.amirah.hajis@nccs.com.sg
20	1.00pm	Journal Club Topic: To be advised @ NCCS Level 1, Mammo Suite Discussion Room	1	Phua Chay Sin 6704 2037 ddipcs@nccs.com.sg
27	5.00pm	NCCS Neuro Onco Tumour Board Meeting Academia, Diagnostic Tower, Level 9 Histopathology Microscopy Teaching Room	1	Saratha 6436 8165 saratha.v.gopal@nccs.com.sg
5, 12, 19, 26	12.00pm	Upper GI Tumour Board Meeting @ NCCS Level 4, Peter & Mary Fu Auditorium	1	Carol Tang / Ang Hui Lan 6436 8539 / 6436 8174 carol.tang.w.c@nccs.com.sg / dmoahl@nccs.com.sg
27	1.00pm	Teaching Session Topic: To be advised @ NCCS Level 1, Mammo Suite Discussion Room	1	Phua Chay Sin 6704 2037 ddipcs@nccs.com.sg
26	7.30am	Endocrine and Rare Tumour Meeting @ NCCS Level 2, Clinic C, Discussion Room	1	Saratha 6436 8165 saratha.v.gopal@nccs.com.sg

DONOR SPOTLIGHT: AT CAPITAL CHARITABLE FOUNDATION

BY TANNIS WALKER Community Partnership

AT Capital Group is a Singapore based investment firm that leverages global investment opportunities across emerging sectors. AT Capital Group believes that the welfare of the communities they operate amongst is of fundamental importance to their sustainably. The company hopes to improve and enrich the lives of the underprivileged in Asia by funding important healthcare projects. Accordingly the firm has invested in children's cancer causes in India, Kazakhstan and now Singapore.

"At AT Capital Charitable Foundation, we believe that we should play a crucial role in taking care of the communities we operate in," said Mr Arvind Tiku, Founder and Group Chairman. "We are delighted to support NCCS' Regional Paediatric Proton Therapy Fund."

NCCS' Regional Paediatric Proton Therapy Fund will help more children survive their cancer with fewer side effects and complications. The fund will allow underprivileged children, from Singapore and neighbouring countries, to undergo the most advanced radiation treatment available for cancer patients.

As 70% of paediatric cancer patients are ultimately cured, utilising new therapies to reduce developmental abnormalities and the occurrence of second malignancies are of great importance. The fund will begin operation upon the completion of NCCS' new Proton Therapy Centre in 2020.

In addition, AT Capital Charitable Foundation made a second donation to support NCCS Deputy Director, Dr Toh Han Chong's Immunotherapy Research Programme.

Immunotherapy has emerged as one of the most exciting new cancer treatments in the last few years. In principle, it works by harnessing the body's immune system to fight the cancer, bringing even more real hope to people with many kinds of cancer.

Dr Toh was the first clinician scientist in Singapore to develop and deliver cellular immunotherapy to patients successfully. His team has just completed a successful Phase II clinical trial using chemotherapy, followed by T-cell immunotherapy for advanced nasopharyngeal cancer (NPC), with strong survival results. The international Phase III trial of this treatment in advanced NPC represents the world's first FDA Phase III trial of T-cell therapy in any cancer.

"We are grateful for the generosity of AT Capital Charitable Foundation and their commitment to drive Immunotherapy Research forward," said Dr Toh. "Thank you for your incredible support of the NCC Research Fund and the Community Cancer Fund."





NCCS RAISED \$22,000 FOR SINGHEALTH PRESIDENT'S **CHALLENGE 2016!**

The President's Challenge is an opportunity for people from all walks of life to come together to help the less fortunate in our community. NCCS rallied with our colleagues in the SingHealth cluster to support this worthy cause. We like to thank all our sponsors, donors and staff in helping NCCS to raise \$22,000 for this year's challenge.



We would also like to acknowledge Vitagen, Tai Sun and Satoyu Trading Pte Ltd for their generous support for the SingHealth President's Challenge.

A BIG THANK YOU to everyone who has made this event a success!



UPCOMING FUNDRAISING EVENTS

Chinese New Year Festive Giving

MID JANUARY 2017

Grab a NCCS red packet to wish our patients well and donate to the Community Cancer Fund.

Venue: NCCS level 1 lobby

Run for Hope 2017

19 FEBRUARY 2017

Join 10,000 runners as they run for cancer research and awareness!

Venue: Bayfront Event Space

Turn to page 14 for more information.

For more information on the fundraising events listed above, please contact Hilman Sobahri at 6236 9440.

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SALUBRIS is produced with you in mind. If there are other topics related to cancer that you would like to read about or if you would like to provide some feedback on the articles covered, please email to corporate@nccs.com.sg.

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