OncoEdu

BANGLADESH SOCIETY FOR BREAST CANCER STUDY BSBCS

6TH BANGLADESH BREAST CANCER CONFERENCE 2026

BANGLADESH BREAST CANCER CONFERENCE 2026

12-13 NOVEMBER 2026

PAN PACIFIC SONARGAON DHAKA

Organized by

BANGLADESH SOCIETY FOR BREAST CANCER STUDY (BSBCS) & ONCOEDU

BCC26

OFFICIAL

best of SABCS®

IN COLLABORATION WITH

BBCC26

6TH BANGLADESH BREAST CANCER CONFERENCE 2026

13TH NOVEMBER 2026

SAN ANTONIO BREAST CANCER SYMPOSIUM®

UT Health San Antonio Mays Cancer Center

AACR American Association for Cancer Research

ORGANIZING PARTNERS

Bangladesh Society for Breast Cancer Study BSBCS

ENCORE MEDICAL EDUCATION

info.bsbcs@gmail.com www.bsbcs.info

SABCS® is the owner of the Trademark for all content related to the SABCS® Symposium Material and any derivatives thereof.

TABLE OF CONTENT

PRELIMINARIES

- Welcome Message
- BSBCS Organization Members
- Invited Speakers

SCIENTIFIC PROGRAM

- Inaugural Session
- Program Schedule
- Venue Guide
- Abstracts

MEMORIES

- Bangladesh Breast Cancer Conference 2015
- Bangladesh Breast Cancer Conference 2017
- Bangladesh Breast Cancer Conference 2019
- Continuous Medical Education (CME)
- GCI-BSBCS Breast Tumour Board
- Annual General Meeting Program (AGM)
- 1st Breast Cancer Preceptorship Program
- 2nd Breast Cancer Preceptorship Program
- Screening Program
- Bangladesh Breast Cancer Conference 2022
- CRC Management Event
- 3rd Preceptorship Program on Sarcoma
- Bangladesh Breast Cancer Conference 2025
- Lung Cancer Preceptorship Program 2026
- GBCC Meeting & Samsung Medical Center South Korea Scientific Visit

WELCOME MESSAGE

CHIEF GUEST

Honourable State Minister

The Minister of Health and Family Welfare of Bangladesh



Dr. M. A. Muhit

It gives me immense pleasure that the Bangladesh Society for Breast Cancer Study (BSBCS) is organizing the 6th Bangladesh Breast Cancer Conference 2026 (BBCC'26) at the Pan Pacific Sonargaon Hotel in Dhaka. I highly commend BSBCS for its dedicated scientific leadership to enrich our regional cancer treatment landscape.

Breast cancer remains the most prevalent malignancy among women in Bangladesh, making women's health and oncology care a paramount national priority for our government. It is a matter of profound concern that a substantial majority of patients are still present at advanced, life-threatening stages due to limited awareness, socio-cultural hesitation, and economic challenges. To overcome these barriers and ensure modern oncology care reaches beyond the capital, the Government of Bangladesh has undertaken landmark initiatives, including establishing 15-storey specialized cancer, kidney, and cardiac hospitals across all eight divisional medical colleges, integrating Clinical Breast Examination (CBE) and early screening into District Hospitals and Upazila Health Complexes, and modernizing apex institutions like NICRH while expanding welfare funds for underprivileged patients. Lasting progress, however, requires strong synergy between public policy and clinical science. By uniting our oncologists with distinguished international faculties, this conference serves as an essential academic bridge to share transformative breakthroughs in breast cancer management.

I extend my heartfelt gratitude to the leadership of BSBCS and the organizing committee for their dedicated effort in making this conference possible. I urge all participating healthcare professionals to translate these valuable scientific insights into compassionate, life-saving care at every patient's bedside, and I wish the 6th Bangladesh Breast Cancer Conference 2026 grand success and an enduring positive impact.

Dr. M. A. Muhit

SPECIAL GUEST

Bangladesh
Society for Breast Cancer Study (BSBCS)

UNFPA Representative in Bangladesh



Ms. Catherine Breen Kamkong

At UNFPA, the United Nations Population Fund, our mission is to ensure that every woman and girl can enjoy her right to sexual and reproductive health, including access to quality cancer prevention, early detection, diagnosis and care. Women's health is not only a health priority; it is a matter of dignity, equality and opportunity. No woman should lose her life to a disease that could have been detected early and treated, nor should her access to lifesaving care depend on where she lives or her economic circumstances.

Breast cancer remains the most commonly diagnosed cancer among women worldwide and a leading cause of cancer-related deaths. In Bangladesh, annually around 13,000 women develop breast cancer, making it the country's most common cancer among women. Too many women still face delayed diagnosis, limited awareness, stigma and barriers to accessing timely treatment. We need to invest in prevention, early detection, effective referral systems and quality treatment is essential to saving lives.

UNFPA has been a longstanding partner of the Government of Bangladesh in strengthening sexual and reproductive healthcare, including efforts to prevent and detect breast and cervical cancers. Through the national cervical cancer screening programme, women aged 30–60 also have access to clinical breast examinations. We continue to support stronger primary healthcare systems and the capacities of nurses, midwives and other frontline health professionals to provide quality, respectful and people-centred services. Our shared ambition is to bring essential healthcare closer to women, especially those in underserved and hard-to-reach communities.

We commend the Government of Bangladesh for its growing commitment to making women's health a national priority, including strengthening breast and cervical cancer prevention, diagnosis and treatment. We are particularly proud to have supported the Government in developing the landmark €250 million Women's Health Initiative with the European Investment Bank, announced in October 2026. This transformative initiative aims to expand access to maternal and reproductive healthcare, including breast and cervical cancer services, while strengthening healthcare infrastructure and referral systems. It represents an important shift towards prevention, early intervention and sustainable investment in women's health, with the potential to improve the lives of millions of women and girls across Bangladesh.

Scientific progress, however, must go hand in hand with equitable access. Advances in cancer research and treatment can only achieve their full potential when they reach the women who need them most. This requires continued collaboration among policymakers, researchers, healthcare professionals, civil society and development partners to translate scientific evidence into effective policies, stronger health systems and accessible services.

I warmly congratulate the Bangladesh Society for Breast Cancer Study on organizing the 6th Bangladesh Breast Cancer Conference 2026. I hope the discussions will inspire practical solutions that advance early detection, improve quality of care and ultimately save more lives.

I extend my sincere appreciation to the organizers, researchers, clinicians and healthcare professionals whose dedication continues to advance cancer care in Bangladesh. UNFPA remains committed to working alongside the Government and all partners towards a future where every woman, regardless of her circumstances, has the opportunity to live a healthy, dignified and fulfilling life.



Ms. Catherine Breen Kamkong

SPECIAL GUEST

Bangladesh
Society for Breast Cancer Study (BSBCS)

Chairman,
Governing Body and Executive Committee, BMSRI



Prof. Dr.
Farhad Haleem Donar

It is my great pleasure that Bangladesh Society for Breast Cancer Study is organizing the 6th Bangladesh Breast Cancer Conference 2026 at the Pan Pacific Sonargaon, Dhaka. This gathering reflects our shared commitment to elevating oncology care, especially in Breast Cancer care across our nation.

In Bangladesh, breast cancer takes a uniquely heavy toll, frequently touching women in the prime of their lives between 35 and 44 years of age. Late diagnosis remains our greatest hurdle, often driven by fear and delayed screening. We gather today to break that silence and turn anxiety into action, healing, and survival. Over the course of this event, we highlight powerful breakthroughs from precision medicine and immunotherapy to advanced radiotherapy and surgical innovations.

However, clinical innovations alone cannot win this fight. True healing happens when science meets genuine human compassion. Sustainable victory comes from real teamwork, where oncologists, surgeons, pathologists partner closely with dedicated oncology nurses. Together, they build a supportive circle that guides each patient with dignity through every hospital visit and treatment cycle. By linking global discoveries with our devoted home oncologists, this platform brings world-class solutions straight to the patient's.

I extend my warmest gratitude to the organizing team for making this vital conference possible year after year. Let us leave this room energized and united: ready to champion early detection, inspire courage in our communities, and ensure that no woman in Bangladesh ever must walk her cancer journey alone.

Prof. Dr. Farhad Halim Donar

SPECIAL GUEST

Bangladesh
Society for Breast Cancer Study (BSBCS)

Director Cum Professor, Radiation Oncology
National Institute of Cancer Research & Hospital
Mohakhali, Dhaka



Prof. Dr.
Mostafa Aziz Sumon

It is a great pleasure to welcome the 6th Bangladesh Breast Cancer Conference 2026 (BBCC'26), organized by the Bangladesh Society for Breast Cancer Study (BSBCS). This event reflects our national commitment to addressing breast cancer prevalence and empowering women's health and well-being.

Globally, breast cancer is a burning concern in the healthcare system and Bangladesh is not any different from that. According to the data published by the GLOBOCAN 2024, breast cancer is the 2nd leading cancer incidence globally and in case of women in both incidence and mortality, it remains in the 1st position. Therefore, to protect our women's health and to ensure their quality of life, it is not dependent on the single effort, rather, we all must come forward to share our cumulative expertise and knowledge.

Today, advanced treatment options include immunotherapy, targeted therapy, precision oncology, and modern radiotherapy which offers new hope beyond traditional chemotherapy. This conference provides an invaluable opportunity to explore updated protocols, engage in hands-on training, and gain global insights to elevate our daily oncology practices.

Eradicating breast cancer demands collaborative action across government and public sectors to unify patient care and establish impactful policies. BBCC'26 serves as a vital catalyst, bridging our home oncologists with international experts to foster lifelong learning and global partnerships.

Lastly, I wish all my best wishes for the 6th Bangladesh Breast Cancer Conference, and I hope this journey of excellence will be continued for the betterment of our country's healthcare system.

Prof. Dr. Mostafa Aziz Sumon

SPECIAL GUEST

Bangladesh
Society for Breast Cancer Study (BSBCS)

Jane F. Desforges Chair in Hematology and Oncology
Turfs University,USA



Prof. Dr. Don S. Dizon

It is an absolute joy that the Bangladesh Society for Breast Cancer Study (BSBCS) is hosting the 6th Bangladesh Breast Cancer Conference 2026 (BBCC'26) on 12–13 November 2026 at the Pan Pacific Sonargaon Hotel, Dhaka. Over the years, this gathering has blossomed into a vibrant academic home where dedicated clinical passion joins hands with cutting-edge science.

Across Bangladesh, breast cancer touches the lives of countless women and families every day. While the rising numbers highlight the urgency of the moment, the bright truth is that breast cancer is highly treatable when detected early. By sparking proactive community awareness, breaking old silences, and expanding timely access to routine screening, we can shift the narrative toward early detection, swift healing, and long-term survival.

We are fortunate to practice in an exhilarating era of precision medicine. From targeted therapies and breakthroughs in immunotherapy to genomic profiling and modern radiation & surgical techniques, cancer care is being reimagined before our eyes. The real magic happens when we translate these high-tech marvels into accessible, practical, and compassionate care tailored for our patients. BBCC'26 tackles that challenge head-on, uniting passionate home oncologists and world-renowned visionaries to craft solutions that are both clinically excellent and economically viable.

I have every confidence that BBCC'26 will shine as an inspiring lighthouse for the entire Asia region, empowering doctors, surgeons, and nurses to deliver dignified, multidisciplinary care to every woman in need. I wish all my best wishes to the 6th Bangladesh Breast Cancer Conference 2026.

Prof. Dr. Don S. Dizon

SPECIAL GUEST

Bangladesh
Society for Breast Cancer Study (BSBCS)

Surgical Oncologist, University of Texas Health Science Center, USA



Prof. Dr. Ismail Jatoi

It is my great honor and pleasure to convey my warmest greetings to the 6th Bangladesh Breast Cancer Conference 2026 (BBCC'26), organized by the Bangladesh Society for Breast Cancer Study (BSBCS) on 12–13 November 2026 at the Pan Pacific Sonargaon Hotel, Dhaka. Over the years, this gathering has distinguished itself as an indispensable academic forum where rigorous science meets deep clinical dedication for the benefit of our patients.

In Bangladesh, breast cancer continues to touch an increasing number of women and families, presenting an urgent public health priority. Yet, there is profound reason for hope as breast cancer is highly treatable when detected early. Overcoming late-stage presentation requires sustained community engagement, dismantling cultural taboos, and ensuring reliable access to routine screening and timely diagnosis across the country.

However, our greatest collective responsibility is equity. True progress lies in translating our global innovations into practical, cost-conscious, and compassionate care tailored to our local healthcare setting. BBCC'26 addresses this challenge head-on by uniting Bangladesh's devoted clinicians with international clinical experts to establish practical solutions.

I am confident that BBCC'26 will continue to stand as a pioneer of multidisciplinary excellence and evidence-based practice across the region, empowering our healthcare teams to deliver standardized, dignified care to every woman who walks through our doors.

I extend my sincere appreciation to the organizing committee and wish the conference grand success and deeply productive deliberations.

Prof. Dr. Ismail Jatoi

PATRON

Bangladesh
Society for Breast Cancer Study (BSBCS)

Director. Bangladesh Cancer Society
Hospital and Welfare Home, Dhaka



Prof. Dr. M.A. Hai

It is my immense pleasure to learn that the Bangladesh Society for Breast Cancer Study (BSBCS) is organizing the 6th Bangladesh Breast Cancer Conference 2026 (BBCC'26) on 12–13 November 2026 at the Pan Pacific Sonargaon Hotel, Dhaka.

Over the years, this conference has distinguished itself as an essential platform where clinical excellence unites with cutting-edge discoveries to advance the standard of patient care. Breast cancer continues to rise at an alarming rate among women across Bangladesh. While breast cancer is highly treatable when detected early, far too many patients in our country are still getting detected at the advanced & life-threatening stages due to limited awareness and delayed diagnosis. Bridging this gap requires sustained nationwide screening campaigns, strong community awareness, and timely access to specialized diagnostic and treatment facilities.

Oncology has entered an era of precision medicine, where targeted therapy, immunotherapy, genomic profiling, and modern radiation techniques are redefining patient outcomes. However, the rising cost and unequal availability of these modern modalities present real challenges for our patients. This year's conference addresses these realities by bringing together national and international experts to translate advanced clinical science into practical, cost-conscious, and compassionate care tailored to our healthcare setting.

I am confident that BBCC'26 will continue to serve as a platform of scientific excellence, empowering clinicians to deliver equitable, multidisciplinary, and standardized cancer care to every woman across Bangladesh. I wish the conference immense success and vibrant, impactful discussions.

Professor Dr. M.A. Hai

PATRON

Bangladesh
Society for Breast Cancer Study (BSBCS)

Chief Consultant, General Surgery & Adviser
Square Hospitals Limited



Prof. Dr. Sanawar Hossain

It is my great pleasure to be informed that Bangladesh Society for Breast Cancer Study is going to organize the 6th Bangladesh Breast Cancer Conference 2026 at the Pan Pacific Sonargaon, Dhaka as a part of their continuous scientific excellence in breast cancer management.

In Bangladesh, breast cancer touches women in the very prime of their lives, often between 35 and 44 years of age. While late diagnosis remains our greatest challenge, we gather here with an unshakable resolve to transform fear into healing and despair into survival. This conference is a symbol and guiding light of that promise, showcasing the frontiers of precision oncology, targeted therapies, revolutionary immunotherapy, radiotherapy and surgical excellence. Yet, true healing demands more than scientific breakthroughs, instead, it requires our collective heart. Real victory over cancer is forged through seamless multidisciplinary teamwork, where oncologists, surgeons, and pathologists unite with compassionate oncology nurses to guide each patient tenderly through every step of her journey, ensuring dignified care and unwavering compliance. By serving as an enduring bridge between global visionaries and our devoted local clinicians, this platform translates global innovation into life-saving comfort directly at the patient's bedside.

To conclude, I would like to extend my heartfelt gratitude to the organizing team of the Bangladesh Society for Breast Cancer Study to continue organizing these groundbreaking scientific events which are playing a pivotal role in changing the oncology landscape in Bangladesh. Together, let us leave this conference empowered not just with new knowledge, but with an ignited passion to restore dignity, inspire courage, and ensure that no woman in Bangladesh ever walks her cancer journey alone.

Prof. Dr. Sanawar Hossain

PRESIDENT

Bangladesh
Society for Breast Cancer Study (BSBCS)



Prof. Dr. Qamruzzaman Chowdhury

Consultant, Oncology & Radiotherapy,
Bangladesh Specialized Hospital Ltd.
Past Managing Director & Head,
Department of Radiation Oncology
Ahsania Mission Cancer & General Hospital (Rtd.)
Professor of Radiation Oncology National Institute
of Cancer Research Hospital (NICRH)

It is my great privilege and honor to welcome all distinguished guests, international and national speakers & faculty members, researchers, and respected delegates to the 6th Bangladesh Breast Cancer Conference 2026, hosted at the Pan Pacific Sonargaon in Dhaka. Since the inception of this conference, this platform has served as a cornerstone for academic excellence and collaborative healthcare advancement in our region at Breast Cancer management.

Cancer care cannot advance in isolation; however, regular scientific dialogue is essential to refine clinical knowledge, foster interdisciplinary partnerships, and elevate the standard of patient care. The primary objective of this conference is to strengthen our multidisciplinary approach, uniting surgical, radiation, and medical oncologists alongside pathologists, radiologists, and supportive care teams. Together, we ensure every patient receives a

Prof. Dr. Qamruzzaman Chowdhury

VICE PRESIDENT

Bangladesh
Society for Breast Cancer Study (BSBCS)

Sr. Consultant
Oncology & Radiotherapy Center
Square Hospitals Limited, Dhaka



Dr. Md. Salim Reza

It is my absolute honor and privilege, as a Vice President of the Bangladesh Society for Breast Cancer Study (BSBCS), to welcome all our distinguished guests, faculty members, speakers from home & abroad, and delegates to the momentous 6th Bangladesh Breast Cancer Conference 2026.

Together, we are embarking on a transformative journey to revolutionize cancer care across Bangladesh by bridging cutting-edge science and real-world clinical practice. This year, we are shining a bright spotlight on innovative & updated treatment protocols, precision oncology, targeted therapies, groundbreaking immunotherapy and state-of-the-art surgery and Radiotherapy treatment.

Yet, the heart of the success of this conference truly lies with our brilliant oncologists, surgeons, pathologists, radiologists, and oncology nurses who drive seamless, lifesaving care every single day. I am confident that the practical insights, multidisciplinary breakthroughs, and updated guidelines shared here will catalyze powerful, positive shifts in our daily practice, shatter treatment delays, and spark coordinated, compassionate healing for every patient. Moreover, this vibrant gathering acts as a dynamic bridge connecting our national medical trailblazers with world-renowned international experts to foster inspiring learning and long-lasting global partnerships.

Lastly, let the ideas ignite over these two extraordinary days, transform your daily practice and bring powerful new hope, health, and victory to women courageously fighting breast cancer across Bangladesh.

Dr. Md. Salim Reza

BSBCS

ORGANIZATION MEMBERS



DR. M A HAI
Patron



DR. SANAWAR HOSSAIN
Patron



DR. QAMRUZZAMAN CHOWDHURY
President



DR. MD. SALIM REZA
Vice-President



MAJ. GEN. DR. MD. AZIZUL ISLAM
Founder Member



DR. SAJJAD MOHAMMAD YUSUFF
Founder Member



DR. FERDOUS ARA BEGUM
Executive Member



DR. ARUNANGSHU DAS
General Secretary



DR. MD. ARIFUR RAHMAN
Organizing Secretary

BSBCS

ORGANIZATION MEMBERS



DR. MD.
ASTEFCHAR HUSSAIN
Executive Member



DR. **ARMAN REZA CHOWDHURY**
Office Secretary



DR.
LUBNA MARIAM
Education, Research and Statistic Secretary



DR.
LATIFA SULTANA
Press &
Publication Secretary



DR. **MD. NURUNNABI**
Financial Secretary



Prof. Dr.
Salma Sultana
Executive Member



Dr. Sharmin Akter Rupa
Executive Member



DR. **A F M ANWAR HOSSAIN**
Executive Member



DR.
SHAFATUJJAHAN
Executive Member

BSBCS

ORGANIZATION MEMBERS



DR. S. M.
KHODEZA NAHAR BEGUM
Executive Member



DR.
SADIA SHARMIN
Executive Member



DR. **MD. NIZAMUL HAQUE**
Executive Member



DR.
FARIAH SHARMEEN
Executive Member



DR.
ALIYA SHAHNAZ
Executive Member



DR. **ASM SHARIFUL ISLAM JHONNY**
Executive Member



DR.
MASUDUL HASAN ARUP
Executive Member



DR. **S M ROKONUZZAMAN**
Executive Member



DR.
SHARMIN SUMI
Executive Member



FARJANA KHAN
Executive Member

INTERNATIONAL SPEAKERS



Prof. Dr. Don S. Dizon

Jane F. Desforges Chair
Hematology & Oncology, Tufts University
Director, Medical Oncology
Rhode Island Hospital, USA

Dr. Herdee Gloriane C. Luna

Research Head
Section of Medical Oncology
National Kidney & Transplant Institute (NKTI)
Quezon City, Philippines





Dr. Marina M. Parton

Consultant Medical Oncologist
The Royal Marsden
NHS Foundation Trust
London, United Kingdom

Dr. Anjali Shah

Assistant Professor
Department of Medical Oncology
ACTREC, Tata Memorial Centre
Mumbai, India





Dr. Takahiro Kogawa

Department Director, Early Clinical
Development for Cancer
Cancer Institute Hospital, JFCR
Tokyo, Japan

Dr. Hee Kyung Ahn

Associate Professor
Hematology-Oncology Division
Samsung Medical Center (SMC)
Seoul, South Korea





Prof. Dr. Rajesh Balakrishnan

Professor & Unit Head
Dept. of Radiation Oncology
Christian Medical College (CMC)
Vellore, India

Prof. Dr. Debnarayan Dutta

Senior Consultant & HOD
Radiation Oncology
Amrita Institute of Medical Sciences
Kochi, India





Prof. Dr. Dodul Mondal

Radiation Oncologist
Director
Max Super Speciality Hospital
Saket, New Delhi, India

Prof. Dr. Tabassum Wadasadawala

Professor
Radiation oncology
ACTREC & Tata Memorial Centre
Mumbai, India





Dr. Najmun Nahar

Senior Radiation Oncologist
Crown Princess Mary Cancer Centre
Westmead Hospital
Australia

Prof. Dr. Ian Kunkler

Consultant Clinical Oncologist
Breast Cancer
Edinburgh Cancer Centre
Edinburgh, United Kingdom





Prof. Dr. Ismail Jatoi

Professor
Surgical Oncology & Endocrine Surgery
University of Texas Health Science Center
San Antonio, USA

Dr. Md. Zaker Ullah

Consultant Surgeon
Oncoplastic Breast & General Surgery
Barts Health NHS Trust
London, United Kingdom





Dr. Dileep Ramesh Hoysal

Associate Professor & Consultant
Surgical Oncology
ACTREC, Tata Memorial Centre
Mumbai, India

Dr. Laura Johnson

Consultant Surgeon
Oncoplastic & Reconstructive Breast Surgery
St Bartholomew's Hospital
London, United Kingdom





Dr. Randima Nanayakkara

Consultant
Surgical Oncology
North Colombo Teaching Hospital
Ragama, Sri Lanka

Dr. Sang Eun Nam

Associate Professor
Breast & Thyroid Surgery
Konkuk University Medical Center
Seoul, South Korea





Dr. Jong Eun Lee

Associate Professor
Breast & Thyroid Surgery
Soonchunhyang University Cheonan Hospital
Cheonan, South Korea

Dr. Jabed Iqbal

Senior Consultant
Anatomical Pathology
Singapore General Hospital
Singapore





Prof. Tomas Kron

Director, Physical Sciences
Medical Physics
Peter MacCallum Cancer Centre
Melbourne, Australia

Dr. Wei Loong Jong

Regional Medical Physics Manager
Radiation Oncology
Icon Cancer Centre ASEAN
Singapore





Dr. Krithika Rangarajan

Associate Professor
Diagnostic & Interventional Oncoradiology
All India Institute of Medical Sciences
New Delhi, India

Dr. Md S Rahman

General Practitioner
Palliative & Pain Management
Gabba Health Hub
Brisbane, Australia



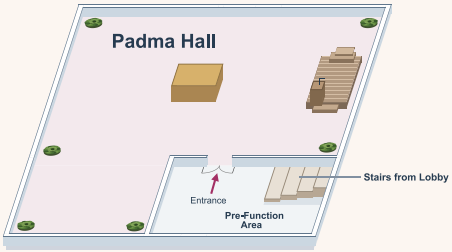
PRE-CONFERENCE WORKSHOPS SCHEDULE

VENUE GUIDE

01 | Ground Floor



02 | Level-01



03 | Oasis Area



PRE-CONFERENCE WORKSHOPS - THURSDAY

3 PARALLEL WORKSHOPS | 3:00 pm - 9:00 pm

Workshop 1 - Oncoplastic and Axillary Surgery: Hands-on Training

Hands-on | Padma

Moderator	Dr. Hasan Shahriar Md. Nuruzzaman Kallol
Faculty	1. Prof. Dr. Salma Sultana 2. Dr. Md. Zaker Ullah (UK) 3. Dr. Laura Johnson (UK) 4. Dr. Dileep Ramesh Hoysal (India) 5. Dr. Jong Eun Lee (South Korea)

Workshop 2 - Breast Radiotherapy for Oncologists: Contouring, Planning and Plan Evaluation in the Hypofractionation Era

Workshop | Surma

Moderator	Dr. Md Abdul Mannan
Panel of Experts	Prof. Dr. Ian Kunkler (UK)
Faculty	1. Prof. Dr. Dodul Mondal (India) 2. Prof. Dr. Tabassum Wadasadawala (India) 3. Prof. Dr. Rajesh Balakrishnan (India) 4. Prof. Tomas Kron (Australia) 5. Dr. Wei Loong Jong (Singapore) 5. Prof. Dr. Debnarayan Dutta (India)

Workshop 3 - Breast Imaging and Intervention for Radiologists

Workshop + hands-on | Chitra

Moderators	Dr. Sumaiya Dr. Tanny Tarafder
Panel of Experts	Prof. Brig Gen Dr. S M A Al-Muid (Rtd.) Prof. Dr. Sharmin Akhtar Rupa
Faculty	1. Prof. Dr. Ismail Jatoi (USA) 2. Dr. Krithika Rangarajan (India) 3. Dr. Jabed Iqbal (Singapore) 4. National Radiology Faculty (TBC)

SCIENTIFIC PROGRAM SCHEDULE

SCIENTIFIC PROGRAM - FRIDAY

08:00 am to 08:30 am — **Registration, poster mounting**

08:30 am to 08:35 am — **Welcome**

Dr. Md. Arifur Rahman, Organizing Secretary, BSBCS

Session 1 | AI and Advances in Breast Radiotherapy

Plenary 1 | Ball Room | 09:00 am - 10:00 am

PANEL OF EXPERTS

1. Brig. Gen. Dr. Rahid Sarwar 2. Prof. Dr. Sk. Golam Mostofa 3. Prof. Dr. Rajesh Balakrishnan (India) 4. Prof. Dr. Dodul Mondal (India)

MODERATOR

1. Dr. Taohida Yasmin

09:00 am to 09:20 am — **AI for breast screening: International status and relevance to South East Asian efforts**

Radiology

Dr. Krithika Rangarajan (India)

09:20 am to 09:40 am

Commissioning and QA for 15- and 5-fraction breast radiotherapy: hybrid/VMAT planning, nodal volumes, and validating AI auto-contouring and auto-planning

Medical Physics

Prof. Tomas Kron (Australia)

09:40 am to 10:00 am

Evidence based for hypofractionation in RNI and reconstruction setting.

Radiation Oncology

Prof. Dr. Tabassum Wadasadawala (India)

Session 2 | Locoregional De-escalation and Systemic Advances in Breast Cancer

Plenary 2 | Ball Room | 10:10 am - 11:10 am

PANEL OF EXPERTS

1. Prof. Dr. MokhlesUddin 2. Prof. Dr. Md. Mofazzel Hossain
3. Dr. Md. Zaker Ullah (UK) 4. Prof. Dr. Salma Sultana

MODERATOR

1. Dr. Lubna Mariam

10:10 am to 10:30 am

Emerging evidence for de-escalation and hypofractionation of radiotherapy in early breast cancer

Radiation Oncology

Prof. Dr. Ian Kunkler (UK)

SCIENTIFIC PROGRAM - FRIDAY

10:30 am to 10:50 am	**De-escalation of Breast Cancer Surgery: A Historical Perspective.** Surgical Oncology Prof. Dr. Ismail Jatoi (USA)
10:50 am to 11:10 am	**"TNBC 2026-Beyond Keynote 522-What Has Changed? Current Standard Emerging Strategies and the ADC Revolution."** Medical Oncology Prof. Dr. Don S. Dizon (USA)
11:20 am	**Open Tea Break**

Inauguration Program

Ball Room | 11:20 am - 01:00 pm

CHIEF GUEST

Hon'ble State Minister, Ministry of Health and Family Welfare.

11:20 am to 11:25 am	**Arrival of the Chief Guest and opening formalities** Dr. Latifa Sultana, Dr. Rubama Karim

11:25 am to 11:30 am	**Welcome Address by Organizing Secretary, BSBCS** Dr. Md. Arifur Rahman
11:30 am to 11:40 am	**BSBCS: The Year in Review and Conference Theme, by General Secretary** Dr. Arunangshu Das
11:40 am to 11:50 am	**Address by Patrons, BSBCS** Prof. Dr. M. A. Hai Prof. Dr. Md. Sanawar Hossain
11:50 am to 12:00 pm	**Address by Special Guests** Prof. Dr. Ismail Jatoi (USA) Prof. Dr. Don S. Dizon (USA)
12:00 pm to 12:05 pm	**Address by Special Guest, Director, National Institute of Cancer Research and Hospital** Prof. Dr. Mostafa Aziz Sumon
12:05 pm to 12:10 pm	**Address by Special Guest, Chairman, Governing Body and Executive Committee, BMSRI** Prof. Dr. Farhad Haleem Donar

SCIENTIFIC PROGRAM - FRIDAY

12:10 pm to 12:15 pm	**Address by Special Guest, UNFPA Bangladesh** Ms. Catherine Breen Kamkong
12:15 pm to 12:35 pm	**Address by the Chief Guest, Hon'ble State Minister, Ministry of Health and Family Welfare** Dr. M. A. Muhit
12:35 pm to 12:45 pm	**Address by the President, BSBCS and Formal Declaration of Opening** Prof. Dr. Qamruzzaman Chowdhury
12:45 pm to 01:00 pm	**Crest presentation, vote of thanks, group photograph** Dr. Md. Arifur Rahman, Organizing Secretary
01:00 pm to 02:30 pm	**Lunch, Jumu'ah prayer and poster session (judged poster walk 02:00 - 02:30 pm)**

PANEL OF EXPERTS

1. Prof. Dr. Dodul Mondal (India) 2. Dr. Ferdous Ara Begum
3. Prof. Dr. Tabassum Wadasadawala (India) 4. Dr. Jong Eun Lee (South Korea)

Session 3 | SABCS Highlights and Systemic Therapy Updates: From Early to Metastatic Breast Cancer

Parallel 1 | Ball Room 1 | 02:30 pm - 04:40 pm

PANEL OF EXPERTS

1. Prof. Dr. Parveen Shahida Akhtar 2. Prof. Dr. Maj. Gen. (Rtd.) Md. Azizul Islam 3. Prof. Dr. Brig. Gen. (Rtd.) Quadrat e Elahi 4. Dr. Ali Asgar Chowdhury 5. Prof. Dr. Abdullah Al Mamun Khan

MODERATORS

1. Dr. Fariah Sharmeen 2. Dr. Sadia Sharmin

02:30 pm to 03:00 pm

Best Of SABCS (eBC HER2+,mBC HER2+)

Medical Oncology

Dr. Herdee Gloriane C. Luna (Philippines)

03:00 pm to 03:20 pm

Optimising adjuvant therapy in ER+/HER2- early breast cancer: CDK4/6 inhibitors, oral SERDs and genomic de-escalation of chemotherapy

Medical Oncology

Dr. Marina M. Parton (UK)

03:20 pm to 03:50 pm

Best of SABCS(DCIS+eBC TNBC+eBC HR+, HER 2-)

Medical Oncology

Dr. Anjali Sulay Shah (India)

03:50 pm to 04:10 pm

Antibody-drug conjugates in metastatic breast cancer: sequencing, HER2-low/ultralow and managing ILD in resource-limited settings

Medical Oncology

Dr. Herdee Gloriane C. Luna (Philippines)

04:10 pm to 04:40 pm

Best of SABCS(mBC HR+)

Medical Oncology

Dr. Takahiro Kogawa (Japan)

Session 3 | Breast Radiation Oncology: Hypofractionation, Nodal Irradiation and Cardiac Safety

Parallel 2 | Ball Room 2 | 02:30 pm - 04:00 pm

PANEL OF EXPERTS

1. Prof. Dr. Ian Kunkler (UK) 2. Prof. Dr. Shahida Alam Iima
3. Prof. Dr. Ehteshamul Hoque 4. Prof. Dr. Asma Siddiqua
5. Prof. Dr. Aliya Shahnaz

MODERATOR

1. Dr. Bhaskar Chakraborty

02:30 pm to 02:55 pm

"HYPORT Adjuvant Trial Data-Protocol, Acute Effects, Initial reports and Cardiac Safety Data"

Radiation Oncology

Prof. Dr. Rajesh Balakrishnan (India)

02:55 pm to 03:15 pm

Radiotherapy after neoadjuvant therapy: NSABP B-51 and response-adapted nodal irradiation, with plan-evaluation pearls

Radiation Oncology

Prof. Dr. Dodul Mondal (India)

03:15 pm to 03:25 pm

Cardiac & Lung Dose Evaluation with Deep-Inspiratory Breath Hold Technique vs Free breathing of Radiotherapy for Left-Sided Breast Cancer.

Oral Abstract (Radiation Oncology)

Col. Dr. S M Rokonuzzaman

03:25 pm to 03:35 pm

What AI Can Actually Help With in Clinical Practice - and What It Still Cannot

Oral Abstract (Radiation Oncology)

SM Ahsanuzzaman

03:35 pm to 03:45 pm

The Unmonitored Heart: Real-World Audit of Cardiac Surveillance Gaps in Left-Sided Breast Cancer Receiving Anthracycline/Trastuzumab with Radiotherapy

Oral Abstract (Radiation Oncology)

Dr. Suriana Sultana

03:45 pm to 04:00 pm

Panel Q&A

All speakers + panel

SCIENTIFIC PROGRAM - FRIDAY

Session 3 | Breast Surgery I: Oncoplastic, Robotic and Post-neoadjuvant Approaches

Parallel 3 | Padma | 02:30 pm - 04:20 pm

PANEL OF EXPERTS

1. Prof. Dr. Ismail Jatoi (USA) 2. Prof. Dr. Tapesh Kumar Paul
3. Prof. Dr. Ahmed Sayeed 4. Prof. Dr. A F M Anwar Hossain
5. Prof. Dr. A K M Minhaj Uddin Bhuiyan

MODERATORS

1. Dr. Tonnima Adhikari 2. Dr. Aditi Paul Chowdhury

02:30 pm to 03:00 pm

Best Of SABCS
Surgical Oncology
Dr. Dileep Ramesh Hoysal (India)

03:00 pm to 03:20 pm

Breast and axillary surgery after neoadjuvant therapy: targeted axillary dissection and the limits of de-escalation
Surgical Oncology
Dr. Md. Zaker Ullah (UK)

03:20 pm to 03:40 pm

Oncoplastic breast conservation and reconstruction in the era of hypofractionated post-mastectomy radiotherapy
Surgical Oncology
Dr. Laura Johnson (UK)

03:40 pm to 04:00 pm

Robotic and endoscopic nipple-sparing mastectomy: evidence and the Korean experience

Surgical Oncology

Dr. Jong Eun Lee (South Korea)

04:00 pm to 04:20 pm

Locally advanced breast cancer in LMICs: breast conservation after neoadjuvant chemotherapy and lessons from Tata Memorial trials

Surgical Oncology

Dr. Dileep Ramesh Hoysal (India)

PANEL

All speakers + panel

Session 3 | Optimising Breast Radiotherapy: Motion Management, Dosimetry and Plan Evaluation

Parallel 4 | Surma | 02:30 pm - 04:30 pm

PANEL OF EXPERTS

1. Prof. Dr. Kazi Manzur Kader 2. Prof. Dr. Golam Mohiuddin Faruque 3. Prof. Dr. Hasin Anupama Azhari 4. Dr. Md. Akhtaruzzaman 5. Dr. Muhammad Masud Rana

MODERATORS

1. Dr. Jannatul Ferdause 2. Md. Jobairul Islam

02:30 pm to 02:50 pm

Radiotherapy Approaches for Tumour Bed Boost in Breast Cancer

Medical Physics

Prof. Tomas Kron (Australia)

SCIENTIFIC PROGRAM - FRIDAY

02:50 pm to 03:10 pm

Empowering Communities: SCMPCR's Drive for Cancer Awareness and Prevention

Medical Physics

Prof. Hasin Anupama Azhari

03:10 pm to 03:30 pm

Motion Management and VMAT Planning in Breast Radiotherapy

Medical Physics

Dr. Wei Loong Jong (Singapore)

03:30 pm to 03:40 pm

Impact of Breast Volume on Dose Distribution and Treatment Planning Quality in Breast Cancer Radiotherapy

RTT

Mr. Md. Motiur Rahman

03:40 pm to 03:50 pm

Quality Assurance of Field-in-Field and Hybrid Breast Radiotherapy: Moving Towards Machine Learning-Based Prediction

Medical Physics

Dr. Md. Akhtaruzzaman

03:50 pm to 04:00 pm

Evaluation of AAA Dose Calculation Sensitivity to High-Density Material Artifacts Using a CIRS Thorax Phantom

Medical Physics

Dr. Md. Anwarul Islam

04:00 pm to 04:10 pm

Evaluation of Amplitude-Gated IMRT for Respiratory Motion Management in Right Breast Radiotherapy

Medical Physics

Maj. Md. Khairul Islam

04:10 pm to 04:20 pm

Dosimetric Comparison of Intensity Modulated Radiotherapy (IMRT) and 3DCRT Field in Field (FiF) Planning Techniques for Left Breast Carcinoma Patient Treatment

Medical Physics

Nahida Sultana

04:20 pm to 04:30 pm

Beyond DVH: Integrating TCP and NTCP into Breast Radiotherapy Plan Evaluation

Medical Physics

Tania Afroz Joly

04:30 pm to 04:40 pm

Tea Break 2 (Surma hall: 04:30 - 04:45 pm, after the 2-hour Physics and RTT Forum)

SCIENTIFIC PROGRAM - FRIDAY

Session 4 | Optimising Breast Cancer Care: Molecular, Systemic and Practical Perspectives

Parallel 1 | Ball Room 1 | 04:50 pm - 06:20 pm

PANEL OF EXPERTS

1. Prof. Dr. Md. Moarraf Hossen 2. Dr. Parvin Akhter Banu 3. A/P Dr. A F M Kamal Uddin 4. Prof. Dr. Syed Md. Akram Hussain 5. Dr. Mohammad Rafiqul Islam

MODERATORS

1. Dr. Masudul Hasan Arup 2. Dr. Md. Ruhul Amin Bhuiyan

04:50 pm to 05:10 pm

Value-based systemic therapy for TNBC in LMICs: platinum, capecitabine and realistic access to immunotherapy

Medical Oncology

Dr. Anjali Sulay Shah (India)

05:10 pm to 05:30 pm

Molecular Perspectives in Breast Cancer Treatment

Medical Oncology

Dr. Takahiro Kogawa (Japan)

05:30 pm to 05:50 pm

Breast cancer in young women: ovarian suppression, CDK4/6 inhibitors, fertility and pregnancy - an Asian perspective

Medical Oncology

Dr. Hee Kyung Ahn (South Korea)

05:50 pm to 06:00 pm

Impact of a Structured Multidisciplinary Tumour Board on Staging, Treatment Planning and Breast Conservation: Interim Analysis

Medical Oncology(Oral Abstract)

Dr. Md. Arifur Rahman

06:00 pm to 06:10 pm

Knowledge, Awareness and Barriers to Breast Cancer Genetic Testing among woman with positive family history: A Cross-Sectional Study

Medical Oncology(Oral Abstract)

Dr. Aditi Paul Chowdhury

06:10 pm to 06:20 pm

Clinico-pathological Characteristics in Young Breast Cancer Patients: Single Centre Retrospective Study in a Low-Middle Income Country

Medical Oncology(Oral Abstract)

Dr. Ayasha Shiddika

Session 4 | Breast Cancer Oral Abstracts: Radiation, Pathology and Supportive Care

Parallel 2 | Ball Room 2 | 04:20 pm - 06:05 pm

PANEL OF EXPERTS

1. Dr. Md. Rashid Un Nabi 2. Col. Dr. S M Rokonuzzaman 3. Dr. Jahan Afroza Khanam Lucky 4. Dr. Ashim Kumar Sengupta 5. Dr. Biswajit Bhattacharjee

MODERATORS

1. Dr. Shamima Afroz Trina 2. Dr. Meher Jabin Shefta

04:20 pm to 04:40 pm

Re-irradiation and it's Complexicity

Radiation Oncology

Dr. Najmun Nahar (Australia)

SCIENTIFIC PROGRAM - FRIDAY

04:40 pm to 05:00 pm

SBRT for oligometastatic and oligoprogressive breast cancer: NRG-BR002, CURB and the OLIGOMA trial

Radiation Oncology

Prof. Dr. Debnarayan Dutta (India)

05:00 pm to 05:20 pm

The Role of Medicinal Cannabis in Supportive and Palliative Cancer Care: Clinical Experience and Practical Challenges

Paliative Care

Dr. Md. Shahnur Rahman (Australia)

05:20 pm to 05:40 pm

“What’s New in Breast Cancer Pathology: Key Updates from the WHO Classification of Breast Tumours, 6th Edition”

Pathology

Dr. Jabed Iqbal (Singapore)

05:40 pm to 05:47 pm

Understanding Spindle Cell Lesions of the Breast: Diagnostic Pitfalls, IHC Strategies and Surgical-Oncological Implications

Oral Abstract(Pathology)

Dr. Md. Golam Mostafa

05:47 pm to 05:54 pm

FISH HER2 Amplification Status among IHC 2+ (Equivocal) Breast Carcinoma Patients of Bangladesh: A Series of 75 Cases

Oral Abstract(Pathology)

Dr. Md. Zillur Rahman

05:54 pm to 06:05 pm

Axillary Mets Detection by Ultrasound

Oral Abstract (Radiology)

Dr. Sabrina Rashid

Session 4 | Oncoplastic & Conservation Surgery, Regional Collaboration and MDT

Parallel 3 | Padma | 04:20 pm - 06:35 pm

PANEL OF EXPERTS

National

1. Prof. Dr. Rayhana Awwal Sumi 2. Prof. Dr. Salma Sultana 3. Prof. Dr. Mohammad Golam Mostafa (pathology)

International (Tumour Board)

1. Prof. Dr. Ismail Jatoi (USA) 2. Prof. Dr. Don S. Dizon (USA) 3. Prof. Dr. Ian Kunkler (UK) 4. Dr. Marina M. Parton (UK) 5. Dr. Md. Zaker Ullah (UK) 6. Dr. Laura Johnson (UK)

MODERATORS

1. Dr. Arman Reza Chowdhury 2. Dr. Hasin Mesbah

04:20 pm to 04:40 pm

Can breast surgery be omitted after complete response to neoadjuvant therapy? Vacuum-assisted biopsy-guided trials

Surgical Oncology

Dr. Sang Eun Nam (South Korea)

SCIENTIFIC PROGRAM - FRIDAY

04:40 pm to 05:00 pm

Challenges in breast cancer management in our region, with particular reference to Sri Lanka, and opportunities for improving care through regional collaboration

Surgical Oncology

Dr. Randima Nanayakkara (Sri Lanka)

05:00 pm to 05:07 pm

Effect of Postoperative Metformin on Seroma Formation Following Breast Surgery: A Prospective Comparative Study

Oral Abstract (Surgical Oncology)

Dr. S K Farid Ahmed

05:07 pm to 05:14 pm

Oncoplastic Breast Surgery: Median 60-Month Follow-Up Results

Oral Abstract (Surgical Oncology)

Prof. Dr. AKM Minhaj Bhuiyan

05:14 pm to 05:21 pm

Expanding Surgical Choices in Breast Cancer: A Five-Year Experience from a Private Cancer Centre

Oral Abstract (Surgical Oncology)

Dr. Zaman Ummay Humayra

05:21 pm to 05:28 pm

Ipsilateral Proactive Oncoplastic Enlargement of the Breast and Prognostic Stratification of Lymph Node Ratio after Axillary Dissection

Oral Abstract (Surgical Oncology)

Dr. A K Mostaque

05:28 pm to 05:35 pm

From Diagnosis to Recovery: The Breast Unit Pathway and Advances in Oncoplastic Breast Surgery in Bangladesh

Oral Abstract (Surgical Oncology)

Dr. Ali Nafisa

05:35 pm to 06:35 pm

MDT tumour board: 3 national cases

MDT

Case presenter - Dr. Hasin Mesbah
Panel: 1. Prof. Dr. Ismail Jatoi (USA) 2. Prof. Dr. Don S. Dizon (USA) 3. Prof. Dr. Ian Kunkler (UK) 4. Dr. Marina M. Parton (UK) 5. Dr. Md. Zaker Ullah (UK) 6. Dr. Laura Johnson (UK)

Session 4 | Translational and Experimental Breast Cancer Research

Parallel 4 | Surma | 04:45 pm - 05:50 pm

PANEL OF EXPERTS

1. Prof. Dr. A F M Anwar Hossain 2. Dr. Sang Eun Nam (South Korea) 3. Dr. Takahiro Kogawa (Japan) 4. Prof. Dr. Dodul Mondal (India)

MODERATOR

1. Dr. ASM Shariful Islam Jhonny

04:45 pm to 04:52 pm

Repurposing Diphenhydramine against breast cancer: mechanistic insights into apoptosis, p53-independent cytotoxicity, and synergy with doxorubicin in MCF-7 cells

Basic Science(Oral Abstract)

Syed Rashel Kabir

SCIENTIFIC PROGRAM - FRIDAY

04:52 pm
to 04:59 pm

ABCB1 Polymorphism and Response to Neoadjuvant Chemotherapy in Breast Cancer Patients from Bangladesh

Basic Science(Oral Abstract)

Mehedi Hasan Al Amin

04:59 pm
to 05:06 pm

Free Breathing versus Deep Inspiration Breath Hold in Post-mastectomy Radiotherapy for Left-Sided Breast Cancer: Dosimetric Comparison

Basic Science(Oral Abstract)

Dr. Nishat Tasnim

05:06 pm
to 05:13 pm

Mammographic Microcalcification May Serve As An Adjunctive Imaging Clue to Her 2-Positive Breast Cancer, Warranting Radiologic-Pathologic Correlation and Confirmation of Her 2 Status.

Basic Science(Oral Abstract)

Dr. Sumaiya Akter Shimu

05:13 pm
to 05:20 pm

Germline and tumor NGS panels in breast cancer: real-world diagnostic yield and reporting

Basic Science(Oral Abstract)

Md. Sanowar Hossain

Closing Plenary

Plenary | Ball Room | 05:50 pm - 06:15 pm

PANEL OF EXPERTS

1. Prof. Dr. Qamruzzaman Chowdhury (President)
2. Dr. Arunangshu Das (General Secretary)

MODERATOR

1. Dr. Latifa Sultana

06:30 pm to 07:30 pm — **Survival Programme**

DISCUSSION LEADER

1. Dr. Lubna Marium

07:30 pm to 07:45 pm — **Cultural Programme**

ABSTRACTS



PROF. DR. DON S. DIZON

Jane F. Desforges Chair
Hematology & Oncology
Tufts University
Director, Medical Oncology
Rhode Island Hospital, USA



PROF. DR. IAN KUNKLER

Consultant Clinical Oncologist
Breast Cancer
Edinburgh Cancer Centre
Edinburgh, United Kingdom

Emerging evidence for de-escalation and hypofractionation of radiotherapy in early breast cancer.

Professor Ian Kunkler, M.B.B.Chir, FRCPE, FRCR, Institute of Cancer Genetics, University of Edinburgh

Radiotherapy with surgery and systemic therapy remain the core treatments in the multidisciplinary treatment of early breast cancer. With breast screening and advances in diagnostic imaging and pathology, they have led to a dramatic fall in UK breast cancer mortality. Improved systemic therapy has almost certainly also made an important contribution to parallel falling loco-regional recurrence rates.

Historically virtually all patients underwent postoperative radiotherapy after breast conserving surgery (BCS) and most with node positive disease after mastectomy. We are moving away from a 'one size fits all' approach to a more nuanced one based on individual risk of recurrence.With the fixed risks of radiation toxicity (cardiac damage/second malignancies), non essential radiotherapy should be avoided where possible. This concept is exemplified by the US Choosing Wisely policy. Over the last two decades randomised trials have shown that postoperative radiotherapy after breast conserving surgery in lower risk older, hormone receptor positive women (CALGB, PRIME 2), receiving 5 years of adjuvant endocrine therapy,can be safely omitted. Other trials of selective radiotherapy de-escalation in biomarker directed trials (LUMINA,IDEA) suggest this approach may be applicable in low risk younger patients. Other trials testing this hypothesis are ongoing. Shorter hypofractionated (40 Gy in 15 daily fractions) or ultra-hypofractionated (26 Gy in 5 daily fractions (eg FAST-FORWARD) to the breast or chest wall or partial breast irradiation (IMPORT-LOW) have proved as effective and more convenient to patients but with lower acute and late morbidity. Further evidence is needed on 1- week of radiotherapy in patients undergoing immediate reconstruction. There is limited data on hypofractionated regional nodal irradiation.

Suggested minimum standards for hypofractionation in low and middle income countries include a linear accelerator with capability to provide 3DCRT with 5mm collimators, CT treatment simulation, inverse planning,quality assurance protocols and a well trained team of radiation/clinical oncologists, medical physicists, therapy radiographers/radiation therapists and dosimetrists. Hypofractionation may widen access to radiotherapy, reduce travelling time for patients and loss of income.

Postoperative radiotherapy alone after BCS, avoiding the toxicity of adjuvant endocrine therapy in low risk,older luminal A like patients, is being explored in the EUROPA trial.

The MRC/EORTC SUPREMO has shown that in intermediate risk breast cancer adjuvant chest wall irradiation does not improve 10 year overall survival and has a minimal effect on chest wall recurrence.There has been a paradigm shift in loco-regional radiotherapy from an anatomy based approach to a biologically informed and adapted one. Response to neoadjuvant chemotherapy (eg NSABP B51 trial) can guide the need for adjuvant irradiation. Identifying biomarkers which predict individual benefit from irradiation is an active field of investigation but none is yet sufficiently validated for routine use in the clinic.



PROF. DR. ISMAIL JATOI

Professor
Surgical Oncology & Endocrine Surgery
University of Texas Health, Science Center
San Antonio, USA



PROF.
RAJESH BALAKRISHNAN

Professor & Unit Head
Dept. of Radiation Oncology
Christian Medical College (CMC)
Vellore, India

HYPORT Adjuvant: One-week versus Three-week hypofractionated adjuvant breast radiotherapy in a high-risk Indian population — Protocol, Acute toxicity, Quality Assurance and Cardiac safety.

Dr Rajesh B on behalf of the HYPORT Adjuvant Trialists group.

Background: FAST-Forward established 26 Gy in 5 fractions as non-inferior to 40 Gy in 15 fractions, but in a predominantly older, screen-detected, breast-conserved population, without simultaneous integrated boost (SIB) and with little regional nodal irradiation (RNI). Its applicability to younger women with larger tumours, mastectomy, neoadjuvant chemotherapy (NACT) and RNI, the typical profile in India, is untested. HYPORT Adjuvant (NCT03788213) addresses this gap.

Methods: HYPORT Adjuvant is a multicentre, open-label, phase III non-inferiority randomised trial. Women with stage I–III invasive breast cancer needing adjuvant radiotherapy after breast-conserving surgery or mastectomy, including after NACT, were randomised to 40 Gy/15 fractions/3 weeks or 26 Gy/5 fractions/1 week to the breast or chest wall, with regional nodes as indicated. Randomisation was stratified by surgery type, RNI, triple-negative status and institute. Tumour-bed boost was delivered as SIB (8 Gy/15 fractions vs 6 Gy/5 fractions) or sequentially (12 Gy/4 fractions). The primary endpoint is 5-year locoregional recurrence (control 5%, non-inferiority margin 3%, n = 2100, 140 events, one-sided α 2.5%, power 80%). Secondary endpoints are overall survival, invasive disease-free survival, late toxicity and quality of life (QoL). Mandatory organ-at-risk constraints and patient-specific dosimetric QA were applied. Acute toxicity (CTCAE v5.0, to 23 weeks) was analysed in the first 271 patients. Cardiac risk was modelled from patient-level dose–volume histograms using EQD2 mean heart dose, the Darby dose–response model and Global Burden of Disease India ischaemic heart disease (IHD) mortality data.

Results: In the interim cohort (135 one-week, 136 three-week), 57% had mastectomy, 35% NACT, 73% grade III tumours and 71% supraclavicular RNI, and 105 received SIB. All mandatory dosimetric criteria were met except in one patient (contralateral breast dose with internal mammary nodal coverage). Median point-dose deviation was under 1% in both arms. With tangential fields, median mean heart dose was 0.55 Gy (one-week) versus 0.68 Gy (three-week), and median mean LAD dose was 1.59 versus 2.34 Gy. Maximum grade 2–3 dermatitis occurred in 2.9% versus 11.1%. Grade 3 dermatitis occurred in 0.7% versus 1.5%, all after mastectomy with scar bolus and none with SIB. No other grade ≥3 toxicity occurred. In the RNI cohort, EORTC QLQ-C30 and FACT-B global, functional and symptom scores were comparable between arms to 18 months. In a single-centre financial sub-study (n = 71), the one-week schedule lowered direct costs about 1.5-fold and caregiver productivity loss by 58% ($p = 0.001$); at six months, 71% versus 64% reported no financial toxicity. In the cardiac sub-study of 1075 patients (546 left-sided), estimated lifetime IHD-related mortality was 0.50% with five fractions versus 0.72% with fifteen ($p < 0.001$), an absolute excess below 1% despite a higher baseline IHD risk among Indian women.

Conclusions: One-week adjuvant breast radiotherapy, including SIB and RNI, is feasible and reproducibly quality-assured in a younger, higher-risk, unscreened Indian population. It produced less acute skin toxicity, equivalent QoL, lower financial burden and no excess, and possibly reduced, modelled cardiac mortality. Accrual is complete and follow-up for the primary 5-year locoregional endpoint is ongoing.



DR. TAKAHIRO KOGAWA

Department Director, Early Clinical
Development for Cancer
Cancer Institute Hospital, JFCR
Tokyo, Japan

Molecularly Guided Treatment in Hormone Receptor–Positive Breast Cancer: From Genomic Testing to Drug Development.

Hormone receptor-positive (HR-positive), HER2-negative breast cancer is increasingly becoming a model for molecularly guided cancer therapy. Although endocrine therapy remains the backbone of treatment, acquired resistance is associated with diverse molecular alterations, including ESR1 mutations and activation of the PI3K–AKT pathway. Understanding these evolving molecular profiles is becoming increasingly important for treatment selection and sequencing.

Advances in molecular diagnostics, including focused genomic testing, comprehensive genomic profiling, and circulating tumor DNA (ctDNA) analysis, now allow molecular information to be incorporated into routine clinical decision-making. However, the key questions are not only what to test, but also when to test, which specimen to use, and how the results should influence treatment. Emerging strategies such as ctDNA-guided detection of acquired ESR1 mutations illustrate how molecular monitoring may further refine endocrine treatment.

This presentation will review recent advances in molecularly guided therapy for HR-positive breast cancer, incorporating our experience with the phase II AGAIN study evaluating abemaciclib rechallenge and molecular analyses after progression, as well as early clinical development of targeted therapies such as the FGFR1–3 inhibitor tasurgratinib (E7090) and the Japanese phase I study of camizestrant. These experiences demonstrate how translational research and early-phase clinical trials can help clarify mechanisms of resistance and identify new therapeutic opportunities.

Another important challenge is the interval between the emergence of global clinical evidence and actual access to new drugs and diagnostic tests in individual countries. Participation in global drug development and regionally relevant early-phase studies is therefore essential to reduce this gap. At the Cancer Institute Hospital of the Japanese Foundation for Cancer Research, genomic research, including comprehensive and whole-genome approaches, is increasingly integrated with translational research and early clinical development. This presentation will highlight how molecular testing, drug development, and clinical implementation can be connected to deliver more precise treatment for patients with breast cancer.



DR. HERDEE GLORIANE C. LUNA

Research Head
Section of Medical Oncology
National Kidney &
Transplant Institute (NKTI)
Quezon City, Philippines

Abstract title "ADCs in Metastatic Breast Cancer: Sequencing, HER2-Low/Ultralow, and Managing ILD in Resource-Limited Settings"

Submitted by: Herdee Gloriane C. Luna, MD

Past President, Philippine Society of Oncologists

herdeeluna@gmail.com

Antibody-drug conjugates (ADCs) have changed the treatment of HR+/HER2-negative metastatic breast cancer. About 65% of these tumors are HER2-low and 25% are HER2-ultralow, so most patients are now biologically eligible for trastuzumab deruxtecan (T-DXd). In DESTINY-Breast06, T-DXd given before chemotherapy improved median PFS to 13.2 versus 8.1 months in HER2-low disease (HR 0.62), with consistent benefit in ultralow disease. Because the 0 versus 0-with-membrane-staining call now changes treatment, reproducible HER2 immunohistochemistry is essential. In chemo-pretreated disease, T-DXd (DESTINY-Breast04) and sacituzumab govitecan (TROPiCS-02) show overall survival benefit. Datopotamab deruxtecan improves PFS but not OS, and sacituzumab tirumotecan shows large PFS gains with immature survival data. ASCENT-07, in chemo-naive patients, did not meet its blinded-review PFS endpoint for sacituzumab govitecan. Cross-trial comparisons remain hypothesis-generating because the populations differ. Sequencing is the central open question. All three approved ADCs carry topoisomerase-I payloads, which raises concern about cross-resistance. Preclinical work suggests resistance is only partly payload-driven, involving efflux transporters, antigen loss, lysosomal handling and DNA repair. Real-world data show that a second ADC performs worse than the first. After T-DXd, a topoisomerase-I ADC gives about 2.5 months of real-world PFS, while chemotherapy with a different mechanism gives about 6 months. Interval chemotherapy between ADCs is not supported by clear evidence. Prospective trials (TRADE-DXd, SERIES) should clarify this. Toxicity management is equally important. Interstitial lung disease occurs in roughly 11–12% of T-DXd-treated patients, with occasional fatal cases. Early detection, prompt interruption and grade-based corticosteroids are key, and selected grade 1 patients may be rechallenged. In resource-limited settings, priorities include validated HER2 testing, protecting T-DXd for appropriate patients, and using evidence-based chemotherapy when ADCs are unavailable. Where tuberculosis is endemic, ILD must be distinguished from infection, so teams need pragmatic pathways built on oximetry, chest X-ray, tele-consultation and patient education.



PROF. TABASSUM WADASADAWALA

Professor
Radiation oncology
ACTREC & Tata Memorial Centre
Mumbai, India

Evidence base for hypofractionation in RNI and reconstruction setting.

The evolution of breast radiotherapy from conventional fractionation to shorter schedules has transformed treatment delivery, improving patient convenience, resource utilization, and access to care. However, the adoption of hypofractionation in regional nodal irradiation (RNI) and following breast reconstruction has historically been limited by concerns regarding lymphoedema, brachial plexus toxicity, locoregional control, and reconstruction-related complications.

Recent randomized evidence has substantially strengthened the role of moderate hypofractionation in locoregional radiotherapy. Trials including HypoG-01 and Skagen Trial 1 have evaluated 40 Gy in 15 fractions against conventional fractionation, providing reassuring evidence regarding arm morbidity and treatment outcomes. Evidence from studies incorporating internal mammary node irradiation further supports the feasibility of shorter treatment schedules for comprehensive nodal irradiation.

An important advance is the RT CHARM (Alliance A221505) trial, which directly addresses hypofractionated postmastectomy radiotherapy (PMRT) in patients undergoing breast reconstruction. The comparison of 42.56 Gy in 16 fractions with 50 Gy in 25 fractions provides prospective evidence regarding reconstruction-related complications in implant-based and autologous reconstruction. These findings are particularly relevant when balancing oncological efficacy, reconstructive outcomes, patient-reported quality of life, and treatment burden. This talk will critically review the evidence supporting hypofractionated RNI and postreconstruction radiotherapy, examining trial design, oncological outcomes, toxicity profiles, reconstruction-related morbidity, and implications for clinical practice. Particular emphasis will be placed on the applicability of these findings to diverse patient populations and resource constrained healthcare settings. The evidence gaps surrounding ultra-hypofractionated PMRT, particularly 26 Gy in five fractions in reconstructed patients receiving comprehensive RNI, will also be discussed.



DR. RANDIMA NANAYAKKARA

Consultant
Surgical Oncology
North Colombo Teaching Hospital
Ragama, Sri Lanka

Challenges in breast cancer management in our region, with particular reference to Sri Lanka, and opportunities for regional collaboration

Author: Dr Randima Nanayakkara

Abstract

Breast cancer is the most common cancer among women in Sri Lanka and across South Asia. In Sri Lanka, official records from the National Cancer Control Programme (NCCP 2022) show a steady rise in cases. Breast cancer makes up 28% of all female cancers (n=5447), with a crude rate of 47.6 and an age-standardised rate of 40.3 per 100,000 women. The daily reality is stark: around 17 women are diagnosed and 3 lose their lives to the disease each day, adding up to more than 6,000 cases and over 1,000 deaths every year. The risk climbs sharply after age 35, although the peak is at 225.6 per 100,000 women between the ages of 70 and 74. Furthermore, among patients with recorded staging, nearly one in three (32.4%) are diagnosed late with locally advanced or metastatic disease (Stage III: 24.6%, Stage IV: 7.8%). Adding to the challenge, 59% of patients have no cancer stage recorded in national registry returns, making it difficult to measure long-term survival across the country.

Sri Lanka provides clinic visits, hospital stays, surgery, radiotherapy, and basic chemotherapy free of charge in public hospitals. Even with universal healthcare, patients still face major delays along the care pathway. As highlighted in the joint IAEA/ WHO/ IARC imPACT Review (2025), key bottlenecks include:

- **Delays in Diagnosis:** Severe shortages of laboratory technicians, cyto-technicians, and medical physicists, long waiting times of 6-8 weeks for pathology and immunohistochemistry results, and long queues for mammograms and ultrasounds
- **Drug Shortages & Supply Issues:** Frequent stock outs of essential cancer medicines, a lack of independent quality checks on imported drugs, and limited public funding for newer targeted therapies and gene testing
- **Radiotherapy Gaps:** A shortage of linear accelerators and high dose rate (HDR) brachytherapy units, which leads to long waiting lists for radiation
- **High Out-of-Pocket Costs:** Modest public health spending (1.4% to 1.8% of GDP) forces families to pay out of pocket (46.8% of total health spending) for private tests and medicines.

Meeting the goals of the WHO Global Breast Cancer Initiative (GBCI) - diagnosing at least 60% of cancers at an early stage, completing tests within 60 days, and delivering timely treatment—requires Sri Lanka and neighbouring countries like Bangladesh to work together. Although Sri Lanka has set up over 24 dedicated breast clinics and expanded regional cancer centres, similar challenges exist across the entire region.

My key note speech will include four practical ways South Asian countries can collaborate:

1. Shared Cancer Registries: Standardising cancer staging and survival tracking across hospital registries to help monitor outcomes across the region

2. Resource Stratified Guidelines: Creating agreed treatment protocols tailored to local budgets and facilities, ensuring high standards of care without unnecessary expense

3. Training & Clinical Exchanges: Sharing expertise through joint surgical workshops, combined virtual tumour boards, and specialist oncology nursing training

4. Joint Drug Procurement: Working together to buy quality tested biosimilars and essential cancer drugs in bulk, reducing medicine shortages and cutting out of pocket costs for families.

By joining forces across South Asia, countries can pool resources, reduce delays, and improve breast cancer survival for all women in the region.



PROF. TOMAS KRON

Director, Physical Sciences
Medical Physics
Peter MacCallum Cancer Centre
Melbourne, Australia

Radiotherapy approaches for tumour bed boost in breast cancer

Tomas Kron

Peter MacCallum Cancer Centre, Melbourne, Australia

Tomas.Kron@petermac.org

Many clinical trials have shown that a boost of radiation to the tumour bed can improve clinical outcomes in adjuvant breast radiotherapy. However, several potential problems exist ranging from identifying the boost volume to delivery of conformal radiotherapy.

Treatment techniques range from sequential boost using electrons or small tangents to simultaneous infield boost in Volumetric Modulated Arc Therapy (VMAT). The presentation will explore the benefits and drawbacks of different approaches including the need of image guidance.

As the number of fractions used for breast radiotherapy is decreasing from 25 to 15 or even 5 fractions, boost strategies are under discussion, and an on-going UK led clinical trial (Fast Forward Boost) is examining the inclusion of a boost in a 5-fraction schedule. While this is an attractive schedule for patients in particular if they have to travel to the radiotherapy centre, it poses challenges similar to other hypofractionated treatment regimens. After securing funding, Australia will join the trial. The presentation will focus on the challenges of its technical implementation and the quality assurance to be considered.



PROF.
DR. MD ZAKER ULLAH

Consultant Surgeon
Oncoplastic Breast & General Surgery
Barts Health NHS Trust
London, United Kingdom

Breast and axillary surgery after neoadjuvant therapy: targeted axillary dissection and the limits of de-escalation

M Z Ullah

Aim:

To review breast and axillary surgery following neoadjuvant systemic therapy (NST), focusing on targeted axillary dissection (TAD) and de-escalation limits.

Methods:

Key trials and cohort studies assessing sentinel lymph node biopsy (SLNB), targeted removal of positive nodes and axillary lymph node dissection (ALND) after NST were reviewed, including ACOSOGZ1071, SENTINA and RISAS.

Results:

NST can downstage disease in the breast and axilla, allowing less extensive surgery in patients. In patients who are node-positive before treatment and node-negative afterwards, SLNB alone has a recognised false-negative rate. Accuracy improves with dual tracer, retrieval of several sentinel nodes and confirmation that the marked positive node has been removed. TAD combines SLNB with removal of the marked node and provides more accurate assessment of the axilla after treatment. In patients with no residual nodal disease, this may allow ALND to be avoided. However, de-escalation is less straightforward when residual disease remains, the marked node cannot be retrieved, nodal findings are discordant, or there was a high nodal burden before treatment. Regional nodal radiotherapy remains important.

Conclusion:

TAD is an important part of axillary management after NST and can reduce the need for ALND in selected patients. It improves staging accuracy while limiting morbidity from extensive surgery. However, it should not replace ALND in all patients. Pretreatment disease burden, response to NST, node localisation, residual disease and planned radiotherapy must be considered. Long-term outcome data are needed to define how far breast and axillary surgery can safely be de-escalated without compromising oncological outcomes.



DR. MD. SHAHNUR RAHMAN

General Practitioner
Palliative & Pain Management
Gabba Health Hub
Brisbane, Australia

The Role of Medicinal Cannabis in Supportive and Palliative Cancer Care: Clinical Experience and Practical Challenges.

Speaker: Dr Md Shahnur Rahman

Specialty: General Practice, Medicinal Cannabis and Chronic Symptom Management

Affiliation: Gabba Health Hub Family Medical Centre, Brisbane, Australia

Abstract

Medicinal cannabis is gaining attention as a potential adjunct in supportive and palliative cancer care, offering opportunities to improve symptom management and patient comfort.

Drawing on Australian clinical experience, this presentation will explore the therapeutic potential of cannabinoids in managing chemotherapy-induced nausea and vomiting, chronic pain, appetite disturbances, insomnia and other distressing symptoms in cancer patients.

The discussion will cover different medicinal cannabis formulations, THC and CBD preparations, clinical indications, contraindications, individualised dosing principles and patient safety considerations.

The presentation will also compare the legal and regulatory frameworks in Australia and Bangladesh, highlighting differences in clinical access and prescribing practices.

Finally, it will explore the future potential of cannabinoid-based medicines in mainstream healthcare, considering evolving scientific research, pharmaceutical industry involvement, regulatory changes and opportunities for responsible medical integration.

Keywords: Medicinal Cannabis, THC, CBD, Cancer Palliative Care, Clinical Applications, Regulation.



DR. ANJALI SHAH

Assistant Professor
Department of Medical Oncology
ACTREC, Tata Memorial Centre
Mumbai, India

ABSTRACT: BBCC 2026 KEYNOTE LECTURE

Bridging the Gap: Value-Based Systemic Therapy for Triple-Negative Breast Cancer

Triple-negative breast cancer (TNBC) makes up a disproportionately high share of breast cancer in South Asia. It presents at a younger age and carries the highest early risk of recurrence among breast cancer subtypes. Therapeutic advances over the past decade have improved outcomes in both early and metastatic disease. Their uptake in low- and middle-income countries, however, remains limited, widening the gap between efficacy and effectiveness.

In early TNBC, pathological complete response (pCR) after neoadjuvant therapy is a strong surrogate for event-free and overall survival. Adding platinum and immune checkpoint inhibitors to neoadjuvant chemotherapy has raised pCR rates. In residual disease, adjuvant capecitabine and, for germline BRCA mutation carriers, olaparib improve survival. This makes upfront germline testing essential.

In metastatic TNBC, treatment is now selected by biomarkers. Options include immunotherapy for programmed death-ligand 1 (PD-L1)-positive disease, antibody–drug conjugates and poly(ADP ribose) polymerase (PARP) inhibitors. Emerging data on sequencing and on combinations in earlier lines are reshaping this landscape.

Key controversies remain:

- **the optimal platinum schedule;**
- **whether adjuvant immunotherapy is needed after pCR;**
- **de-escalation in low-risk disease;**
- **how to interpret pCR gains before survival data mature.**

Finally, this lecture outlines strategies to bridge the gap between evidence and access. These include affordable alternative agents, low-dose immunotherapy, wider germline testing and the generation of evidence relevant to our populations.



PROF. TOMAS KRON

Director, Physical Sciences
Medical Physics
Peter MacCallum Cancer Centre
Melbourne, Australia

Radiotherapy approaches for tumour bed boost in breast cancer

Tomas Kron

Peter MacCallum Cancer Centre, Melbourne, Australia

Tomas.Kron@petermac.org

Motion management for radiotherapy in breast cancer: necessity or waste of time? Modern radiotherapy benefits from the ability to deliver dose distributions that are highly conformal to the identified target region whilst minimising dose to surrounding healthy structures. Target and organ motion can affect this targeting ability and breathing and to a lesser extend cardiac motion is of relevance for breast cancer radiotherapy. Several methods have been introduced to manage breathing motion. While gated delivery is rarely used, breath hold has been demonstrated to reduce cardiac and lung dose consistently in particular in left sided breast cancer patients. Methods to monitor successful motion management, for example optical surface guidance, have improved over the last decade and provide confidence that the treatment is delivered as planned. However, motion management requires additional resources and may prolong treatment time. The presentation will review different motion management strategies and examine their implementation options with particular reference to breath-hold strategies. The primary aim of motion management in breast cancer is to reduce late toxicities and the induction of secondary malignancies. As the importance of non-cancer radiation detriment, in particular cardiovascular problems and immune effects, is increasingly recognised, motion management is likely to become part of treatment for all breast cancer patients that can benefit from radiotherapy.



DR. JONG EUN LEE

Associate Professor
Breast & Thyroid Surgery
Soonchunhyang University
Cheonan Hospital
Cheonan, South Korea

Robotic and Endoscopic Nipple-Sparing Mastectomy: Clinical Evidence, Technological Evolution, and the Korean Experience

Background and Objectives

Breast cancer surgery has evolved beyond complete tumor removal toward preserving breast appearance, body image, and quality of life without compromising oncologic safety. Nipple-sparing mastectomy (NSM) preserves the skin envelope and nipple–areolar complex, providing a foundation for immediate breast reconstruction. Endoscopic and robotic approaches further extend this concept by relocating the incision to a less visible axillary site. However, the clinical value of these approaches should be assessed not only through cosmetic outcomes but also through surgical morbidity, oncologic outcomes, patient-reported outcomes, and reproducibility. This lecture reviews the evidence supporting endoscopic and robotic NSM, discusses the transition from multiport to single-port robotic platforms, and presents the Korean experience in multicenter research, surgical education, and standardization.

Clinical Evidence for Endoscopic Breast Surgery

Endoscopic breast surgery established the foundation for minimal-access approaches by enabling breast tissue removal through a limited remote incision. An endoscopic NSM series reported approximately 90% satisfaction with postoperative scar appearance, location, and length, with partial nipple ischemia or necrosis and complete nipple–areolar complex necrosis reported in 3.7% and 1.3%, respectively. Studies of endoscopic breast-conserving surgery have also demonstrated high cosmetic satisfaction and acceptable early oncologic outcomes. Nevertheless, the available studies are heterogeneous in patient selection, operative techniques, and follow-up duration. Operative times are generally longer than those of conventional surgery, and long-term comparative evidence remains limited. These findings support the cosmetic potential of endoscopic approaches while emphasizing the need for cautious interpretation of their broader clinical benefits.

Surgical Outcomes and Patient Experience with Robotic NSM

Robotic NSM provides high-resolution three-dimensional visualization and articulated instruments, facilitating dissection through a limited axillary approach. Comparative data reported mean incision lengths of 8.3 cm for conventional NSM and 4.1 cm for robotic NSM, illustrating the reduction in visible surgical access. Minimal-access approaches have demonstrated improved wound-specific satisfaction, although consistent superiority across overall BREAST-Q domains has not been established. A small prospective single-port robotic cohort also suggested the potential for preservation of nipple and skin sensation; however, larger comparative studies are required to confirm this benefit. Scar-related satisfaction, sensory preservation, and overall quality of life should therefore be regarded as distinct outcomes rather than interchangeable measures of surgical success.

Oncologic Safety

Emerging long-term comparative evidence provides reassuring, although not definitive, findings regarding the oncologic safety of robotic NSM. In a randomized study with a median follow-up of approximately 6.5 years, 5-year overall survival was 97.1% in both the robotic and open surgery groups, while 5-year disease-free survival was 88.2% and 88.6%, respectively. Importantly, the study was not designed or powered to establish definitive oncologic noninferiority. A Korean comparative study of 401 patients, including 162 undergoing robotic NSM and 239 undergoing conventional NSM, reported recurrence rates of 3.8% and 5.9%, respectively, without a significant difference in recurrence-free survival. No significant difference in recurrence was observed between multiport and single-port robotic approaches. These results support continued evaluation and clinical application in appropriately selected patients, but the absence of a statistically significant difference should not be interpreted as proof of oncologic equivalence.

Single-Port Technology and Multicenter Reproducibility

Single-port robotic surgery differs from multiport surgery by introducing the camera and instruments through a single multichannel cannula and achieving triangulation through internal articulation. A flexible camera and articulating instruments may facilitate dissection along the curved breast envelope, particularly in medial regions and areas with restricted instrument angles, while reducing external arm collisions. However, bedside assistance, suction, working distance in larger breasts, and specimen extraction remain important practical considerations. The Korean SPROUT multicenter study included 428 patients from 12 institutions and reported a mean incision length of 45.3 mm, no complications in 80.8% of patients, a nipple necrosis rate of 1.2%, and a reoperation rate of 2.8%. Learning-curve patterns varied across institutions: some centers reached stabilization after approximately 12–20 cases, whereas others demonstrated relatively stable performance from their early cases. These findings suggest that single-port NSM can be implemented across institutions, although learning trajectories are not uniform.

The Korean Experience and Strategies for Safe Adoption

Since the first robotic NSM in Korea in 2016, clinical experience has expanded alongside collaborative research and structured education. The Korea Robot-Endoscopy & Minimal Access Breast Surgery Study Group (KoREa-BSG) has supported multicenter studies addressing postoperative complications, prospective outcomes after mastectomy with reconstruction, robotic versus open surgery, single-port surgical outcomes, and learning curves. Safe implementation requires appropriate patient selection based on disease extent, skin and nipple involvement, and breast size and morphology. Standardization of patient positioning, working-space creation, docking, and dissection sequence should be combined with a stepwise training pathway incorporating observation, cadaveric workshops, and proctored introduction to independent practice. Continuous monitoring of complications, oncologic outcomes, and patient-reported outcomes is essential to maintain surgical quality as these techniques become more widely adopted.

Conclusions

Endoscopic and robotic NSM offer surgical options for appropriately selected patients seeking reduced visible scarring and improved wound-related satisfaction. Recent long-term comparative findings and Korean multicenter experience provide encouraging evidence regarding clinical outcomes and reproducibility. Nevertheless, superiority in overall quality of life, definitive oncologic noninferiority, and cost-effectiveness remain to be established. Future research should prioritize prospective studies with long-term follow-up, standardized outcome assessment, and patientcentered comparisons of surgical platforms. The ultimate goal is not to increase the use of technology itself, but to deliver better breast cancer surgery through appropriate technology, careful patient selection, and reproducible surgical practice.



DR. WEI LOONG JONG

Motion Management and VMAT Planning in Breast Radiotherapy
Icon Cancer Centre Mount Alvernia, Singapore

VMAT is increasingly used in left-sided breast radiotherapy for conformal target coverage. DIBH increases heart–chest-wall separation and expands the lungs, but the planned dosimetric benefit depends on reproducing this geometry during treatment. Arc design affects target coverage, heart and lung sparing, low-dose exposure, delivery time and the number of breath-holds required. Surface-guided, spirometry-based and external marker systems support breath-hold monitoring, while image guidance assesses internal anatomy. Plan design should balance dose objectives with the patient's ability to perform repeatable breath-holds.



DR. HEE KYUNG AHN

Associate Professor
Hematology-Oncology Division
Samsung Medical Centrer (SMC)
Seoul, South Korea

Breast cancer in young women: ovarian suppression, CDK4/6 inhibitors, fertility and pregnancy - an Asian perspective.

Breast cancer in Asia is characterized by a younger age at diagnosis, with approximately half of patients being premenopausal in Korea. Young Asian women with breast cancer represent a clinically important population with distinct biological characteristics and therapeutic challenges. Molecular profiling studies have demonstrated enrichment of luminal B tumors, increased proliferative activity, and distinct genomic and immune features in young Asian breast cancer. Particularly among patients with hormone receptor-positive (HR+)/HER2-negative disease, younger age is associated with less favorable outcomes. Beyond tumor biology, the management of premenopausal breast cancer involves unique considerations, including ovarian function, fertility preservation, pregnancy planning, and the long-term impact of endocrine therapy on quality of life. These challenges underscore the importance of treatment strategies tailored to this population.

Despite this substantial disease burden, evidence guiding endocrine-based treatment in premenopausal women remained limited for decades, as most pivotal clinical trials predominantly enrolled only postmenopausal patients. Recognizing this unmet need, Korean investigators actively advocated for the inclusion of premenopausal women in global clinical trials while initiating dedicated investigator-initiated studies to generate evidence directly applicable to this population. These efforts contributed to several landmark trials. MONALEESA-7, a global industry-sponsored trial with substantial Asian investigator involvement, demonstrated that ribociclib combined with endocrine therapy significantly improved progression-free and overall survival in premenopausal women with advanced HR+/HER2-negative breast cancer. The investigator-initiated Young-PEARL trial (KCSG BR15-10) further demonstrated superior progression-free survival with palbociclib plus exemestane and ovarian function suppression compared with capecitabine, supporting endocrine-based targeted therapy as an alternative to chemotherapy. In early breast cancer, the Korean ASTRRA trial established the long-term benefit of adding two years of ovarian function suppression to tamoxifen following chemotherapy, significantly improving disease-free survival. These studies illustrate how recognition of the distinctive biological and clinical needs of young Asian women with breast cancer has driven practice-changing evidences. Continued integration of biological insights, dedicated clinical trials, and reproductive health considerations will be essential to optimize both oncologic outcomes and quality of life for premenopausal women worldwide.



DR. SANG EUN NAM

Associate Professor
Breast & Thyroid Surgery
Konkuk University Medical Center
Seoul, South Korea

Purpose: The optimal duration of ovarian function suppression (OFS) for premenopausal women with hormone receptor–positive breast cancer remains undefined. We evaluated the rate and predictors of ovarian function recovery after a fixed 2-year course of OFS plus tamoxifen, and the association between recovery and disease-free survival (DFS).

Methods: We retrospectively reviewed premenopausal women with breast cancer who underwent surgery at two institutions between 2010 and 2019 and completed 2 years of OFS combined with tamoxifen. Ovarian function recovery was defined by resumption of menses and/or premenopausal serum FSH and estradiol. Time to recovery was analyzed with the Kaplan–Meier method and Cox regression. The association between recovery and DFS was assessed with a time-dependent Cox model (primary analysis) and landmark analyses at 12, 18, 24, 48, and 60 months.

Results: Of 855 patients screened, 703 were eligible. Ovarian function recovered in 321 patients (45.7%) at a median of 18 months [from OFS completion — confirm time zero]; recovery curves reached a plateau at approximately 50–60 months. Recovery was significantly less likely in women aged ≥45 years than in those aged <40 years (HR 0.36, 95% CI 0.28–0.48; p<0.0001) and in women who received chemotherapy (HR 0.72, 95% CI 0.57–0.92; p=0.008). BMI, family history, and stage were not associated with recovery. In the time-dependent Cox model, recurrence risk during the recovered state was lower than during the non-recovered state (HR 0.58, 95% CI 0.33–1.01; p=0.054). Landmark analyses at 24 and 48 months showed the same direction (HR 0.76 and 0.65, respectively), although none reached statistical significance.

Conclusion: After 2 years of OFS plus tamoxifen, fewer than half of premenopausal patients regained ovarian function, and recovery was strongly age-dependent. Recovery was not associated with worse DFS; if anything, recurrence risk tended to be lower. These data support age-tailored decisions on OFS duration and suggest that ovarian function recovery after 2-year OFS does not compromise outcomes in this population.

Keywords: breast cancer; premenopausal; ovarian function suppression; ovarian function recovery; tamoxifen; disease-free survival



PROF.
DR. DODUL MONDAL

Radiation Oncologist
Director
Max Super Speciality Hospital
Saket, New Delhi, India.



PROF. DR. JABED IQBAL

Senior Consultant
Anatomical Pathology
Singapore General Hospital
Singapore



PROF.
DR. DEBNARAYAN DUTTA

Senior Consultant & HOD
Radiation Oncology
Amrita Institute of Medical Sciences
Kochi, India



DR.
KRITHIKA RANGARAJAN

Associate Professor
Diagnostic & Interventional Oncoradiology
All India Institute of Medical Sciences
New Delhi, India



DR. NAJMUN NAHAR

Senior Radiation Oncologist
Crown Princess Mary Cancer Centre
Westmead Hospital, Australia



DR LAURA JOHNSON

Consultant Surgeon
Oncoplastic & Reconstructive
Breast Surgery
St Bartholomew's Hospital
London, United Kingdom



DR. DILEEP RAMESH HOYSAL

Associate Professor & Consultant
Surgical Oncology
ACTREC, Tata Memorial Centre
Mumbai, India



DR. MARINA M. PARTON

Consultant Medical Oncologist
The Royal Marsden
NHS Foundation Trust
London, United Kingdom

Mehedi Hasan Al Amin1,2, Md. Siddiqul Islam3*

1 Department of Pharmacy, Southeast University, Tejgaon Industrial Area, Dhaka-1207, Bangladesh 2 Department of Clinical Pharmacy and Pharmacology, Faculty of Pharmacy, University of Dhaka, Dhaka 100

ABCB1 Polymorphism and Response to Neoadjuvant Chemotherapy in Breast Cancer Patients from Bangladesh

Introduction: ABCB1 encodes P-glycoprotein, a drug efflux pump that moves many chemotherapy drugs out of cells. Variants in this gene may change how well a tumor responds to treatment. We examined whether ABCB1 genotypes are linked to response to neoadjuvant chemotherapy.

Methods: We studied 100 breast cancer patients who received neoadjuvant chemotherapy. Genotypes were determined by PCR-RFLP. We calculated odds ratios (OR) with 95% confidence intervals (CI), and considered $p < 0.05$ significant.

Results: Of the 100 patients, 12 had the CC genotype, 56 had CT, and 32 had TT. Response rates were 33.3% (4/12) in CC, 53.6% (30/56) in CT, and 71.9% (23/32) in TT. Compared with CC, the TT genotype conferred a significant protective effect against treatment non-response (OR 0.19, 95% CI 0.05 to 0.81, $p = 0.025$). The CT genotype and combined CT+TT genotypes did not reach statistical significance.

Conclusion: Patients with the ABCB1 TT genotype were more likely to respond to neoadjuvant chemotherapy than those with the CC genotype, though larger studies are needed to confirm these findings.

M. Monir Uddin

North South University

Artificial Intelligence for Breast Cancer Radiotherapy: Automated Contouring, Dose–Volume Prediction, and Clinical Workflow Evaluation in Bangladesh

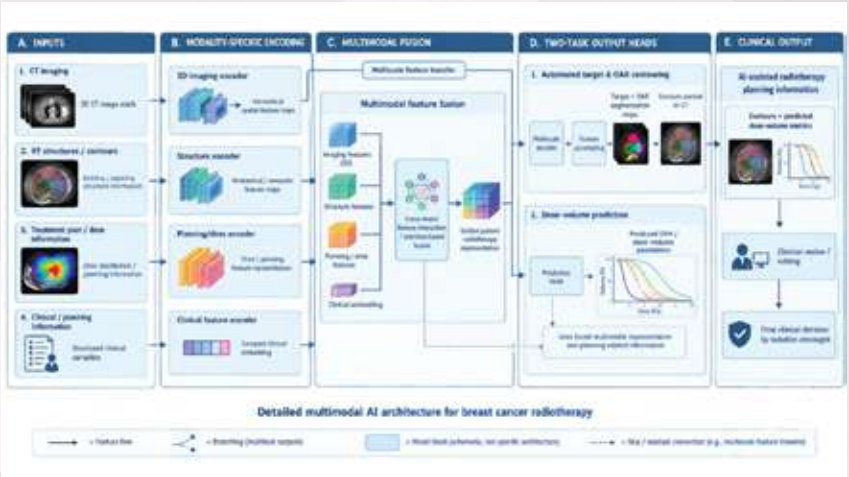
Introduction: Radiotherapy for breast cancer requires accurate outlining of the treatment targets and nearby organs at risk (OARs), followed by careful evaluation of the planned radiation dose. These steps can take considerable time and require experienced staff, which can be challenging in busy radiotherapy centers. The workload can be particularly difficult in low-and middle-income countries (LMICs), where the demand for cancer treatment is increasing while specialist resources remain limited. Artificial intelligence (AI) may help reduce this workload by assisting with routine parts of radiotherapy planning. We developed an AI system to automatically outline treatment targets and OARs and to predict important dose–volume parameters for breast cancer radiotherapy. We evaluated the system using data from four radiotherapy centers in Bangladesh and assessed its usefulness in the clinical workflow with radiation oncologists.

Methods: We retrospectively collected more than 1,000 breast cancer radiotherapy cases from four institutions in Bangladesh: Bangladesh Medical University, Square Hospital, Labaid Hospital, and United Hospital. The AI system used patient imaging and radiotherapy planning information to automatically generate contours of treatment targets and clinically important OARs and to predict dose–volume parameters. The accuracy of the generated contours was compared with expert clinical contours using standard segmentation measures. The predicted dose–volume parameters were compared with those from the actual clinical treatment plans. We also performed a retrospective multi-institutional reader study involving nine radiation oncologists with different levels of experience. They assessed the AI-assisted workflow using measures such as task completion time and other clinically relevant performance measures. The system was also implemented in a web-based interface that allows radiation oncologists to review the AI-generated contours and dose-related information.

Results: The AI system achieved mean Dice similarity scores above 90% for the evaluated treatment targets and OARs, indicating close agreement between the AI-generated and expert clinical contours. The predicted dose–volume

parameters also showed good agreement with the corresponding measurements from the clinical treatment plans. In the multi-institutional reader study, the AI-assisted workflow reduced the time required for the evaluated radiotherapy planning tasks while maintaining clinically acceptable performance. The benefit was observed among radiation oncologists with different levels of experience. A web-based system was developed to allow clinicians to review the AI-generated contours and dose-related information and incorporate them into the radiotherapy planning workflow.

Conclusion: Our findings suggest that AI can assist with breast cancer radiotherapy planning using real-world clinical data collected from multiple centers in Bangladesh. By combining automated contouring with dose–volume prediction and clinical workflow evaluation, the system may help reduce the workload associated with radiotherapy planning while keeping radiation oncologists responsible for the final treatment decisions. The web-based implementation provides a practical platform for further clinical evaluation and may be particularly useful in radiotherapy centers where specialist time and resources are limited.



Dr. Sabrina Rashid. MBBS, DMUD, PhD.

Bangladesh Specialized Hospital PLC

Axillary Mets Detection by Ultrasound

Introduction: ABSTRACT This lady of 52 years age had a lumpectomy for carcinoma Right Breast. Now she had come for follow up after chemotherapy and radiotherapy. On Ultrasound scan her both breasts were normal but there were a few enlarged lymph nodes in her left axilla not in Right axilla. The cortex of the biggest lymph node was 6mm thick and asymmetrical. On Doppler application there was much increased vascularity, also the flow was peripheral. Flow is central in the normal or benign lymph node. So this was mets or metastasis in the lymph node, but in opposite axilla. Key words: axillary, lymph node, mets.

Methods: On Ultrasound scan her both breasts were normal but there were a few enlarged lymph nodes in her left axilla not in Right axilla.

Results: The cortex of the biggest lymph node was 6mm thick and asymmetrical.

Conclusion: So this was mets or metastasis in the lymph node, but in opposite axilla.

Tania Afroz

Ahsania Mission Cancer and General Hospital

Beyond DVH: Integrating Tumor Control Probability and Normal Tissue Complication Probability Into Breast Radiotherapy Treatment Plan Evaluation.

Introduction: Dose–volume histogram (DVH) analysis is fundamental to radiotherapy treatment plan evaluation. However, conventional dosimetric parameters do not directly estimate tumor control probability (TCP) or normal tissue complication probability (NTCP). Integrating radiobiological modeling with DVH analysis may provide additional information for evaluating target coverage and normal-tissue dose distributions in left-sided chest-wall radiotherapy. To investigate the relationship between conventional DVH parameters and model-estimated TCP and NTCP in patients receiving three-dimensional conformal radiotherapy (3D-CRT) for left-sided chest-wall irradiation.

Methods: This retrospective dosimetric and radiobiological modeling study will include 15-20 eligible patients treated with 3D-CRT for left-sided chest-wall irradiation. Anonymised treatment-planning data and dose–volume histograms will be obtained from the Monaco treatment planning system. Target coverage and dose distributions to selected organs at risk, particularly the heart and ipsilateral lung, will be evaluated using conventional DVH parameters. TCP will be estimated using a published radiobiological tumour-control model, while NTCP will be calculated using the Lyman–Kutcher–Burman model with appropriate, endpoint-specific published parameters. Statistical analyses will assess the relationships between conventional dosimetric parameters and model-derived probabilities. Sensitivity analysis will examine the influence of radiobiological parameter selection on the estimated outcomes.

Results: The study will characterize the relationships between conventional DVH parameters and radiobiological estimates and assess whether TCP/NTCP modeling helps distinguish treatment plans with comparable target coverage but different organ-at-risk dose distributions.

Conclusion: Integrating TCP and NTCP modeling with conventional DVH analysis may provide a complementary approach to evaluating left-sided chest-wall radiotherapy plans. The clinical interpretation of these estimates will depend on model validity, parameter selection and uncertainty, and the findings will not be interpreted as observed clinical outcomes in the absence of clinical follow-up data.

Col Dr. S M Rokonuzzaman

Head of Department, Department of Radiation Oncology, Combined Military Hospital, Dhaka.

Cardiac & Lung Dose Evaluation with Deep-Inspiratory Breath Hold Technique vs Free breathing of Radiotherapy for Left-Sided Breast Cancer.

Introduction: Left-sided breast cancer radiotherapy in Bangladesh, a resource-limited setting, necessitates optimising treatment strategies to minimise cardiac toxicity while maintaining efficacy. This study explores the potential of Deep Inspiratory Breath Hold (DIBH) for reducing cardiac dose in this patient population.

Methods: This retrospective study at Combined Military Hospital & Square Hospitals Ltd., Dhaka, from March 2019 to March 2025, examined 350 patients with left-sided breast cancer. It compared cardiac and lung doses using DIBH and free-breathing techniques in Intensity Modulated Radiotherapy (IMRT) and three-dimensional conformal radiotherapy (3DCRT) plans. The study included patients aged 18-70 with invasive ductal carcinoma who could hold their breath for at least 30 seconds, excluding those with low performance or incomplete treatment. Data were analysed with SPSS version 29, focusing on optimising treatment accuracy and minimising cardiac doses.

Results: In a study of three hundred fifty female patients with left-sided breast cancer, 95.0% underwent radiotherapy using the DIBH technique, primarily with Intensity Modulated Radiotherapy (IMRT, 60.0%) to enhance cardiac safety. The majority, aged 30-49 (63.3%), had received previous surgery and chemotherapy (96.7%). Treatments were standardised with supine positioning using a breast board (98.3%). In this study, the mean heart dose (Dmean) was 5.23 Gy with the free-breathing technique and 3.2 Gy with the DIBH technique, representing a 56% reduction in mean heart dose with DIBH. The mean lung dose decreased from 16.5 Gy in the free-breathing technique to 10.8 Gy with DIBH, indicating an overall 34% reduction in lung dose with the DIBH technique. A positive correlation was observed between the heart–anterior chest wall distance and the mean heart dose in both techniques. The heart–anterior chest wall distance increased from 0.461 cm during free breathing to 0.835 cm with DIBH, reflecting improved cardiac sparing with the DIBH technique.

Conclusion: This study validates the effectiveness of the deep inspirational breath-hold technique in reducing cardiac exposure during left-sided breast cancer radiotherapy. By integrating DIBH with IMRT and 3DCRT, we observed significant reductions in cardiac doses without compromising treatment accuracy. The results support wider use of DIBH, particularly in settings with limited resources, to enhance safety and efficacy in cancer treatment.

1. Ayasha Shiddika, 2. Qamruzzaman Chowdhury, 3. Salma Sultana, 4. Ferdous Ara Begum, 5. Sharmin Akter Rupa, 6. S M Khodeza Nahar Begum, 7. Mashud Parvez, 8. Md. Nurunnabi, 9. Md. Arifur Rahman

1.Bangladesh Specialized Hospital (BSH), Dhaka, Bangladesh, 2. Akhaura Health Complex, Brahmanbaria, Bangladesh

Clinico-pathological Characteristics in Young Breast Cancer Patients: Single Centre Retrospective Study in a Low-Middle Income Country

Introduction: Breast cancer in younger patients can exhibit considerable clinicopathological heterogeneity. Characterising the presentation in a lower-middle-income setting may help inform timely diagnosis and individualised management. We assessed the initial clinicopathological characteristics of patients aged ≤45 years at a single centre in Bangladesh.

Methods: This retrospective cross-sectional study included 465 patients aged ≤ 45 years whose electronic medical records were available at Bangladesh Specialised Hospital during 2018–2024. Demographic characteristics, histology, tumour grade and stage, receptor phenotype, laterality, family history, and sites of disease involvement were analysed descriptively.

Results: The mean age was 37.7 ± 5.4 years; 302 patients were aged 35–45 years, 156 were aged 25–35 years, and seven were aged 15–25 years. Invasive ductal carcinoma was the predominant histology (82%), followed by ductal carcinoma in situ (14.7%). Grade II tumours were most frequent (260/465, 55.9%), followed by grade III tumours (182/465, 39.1%). Stage III was the commonest stage at presentation (187/465, 40.2%), followed by stage II (169/465, 36.3%), stage IV (56/465, 12.0%), and stage I (53/465, 11.4%). Receptor-defined phenotypes were ER/PR-positive, HER2-negative (177/465, 38.1%); triple-negative (153/465, 32.9%); triple-positive (102/465, 21.9%); and ER/PR-negative, HER2-positive (33/465, 7.1%). Left-sided, right-sided, and bilateral disease occurred in 250 (53.8%), 208 (44.7%), and seven (1.5%) patients, respectively. A positive family history was reported by 37 patients (8.0%). Regional lymph-node involvement was reported in 40.5%; listed distant sites included bone (4.5%), lung (3.0%), liver (3.0%), brain (1.0%), and skin (0.5%), while multiple sites were recorded in 5.0%.

Conclusion: More than half of patients aged ≤45 years presented with stage III–IV breast cancer, and grade II–III tumours were common. The substantial proportion of triple-negative disease and advanced-stage presentation underscore the importance of prompt assessment, early detection approaches, and individualised treatment pathways in this setting.

Mahmudul Hasan1, Nelofar Yasmin2, Md Abdul Auwal1, Rabeya Khatun2, Tasnima Kamal1, Md Rashel Mollah1, Al-Amin Hossain1, Azadur Rahman Bhuiyan1, Md Ashraful Islam1, Zinnat Ara Moni1, Asma Ul Husna Biswas1, Md Asadur Rahman3, Md Farhadul Islam1,4*

1Rajshahi University, Rajshahi; 2Institute of Biological Science, Rajshahi University, Rajshahi; 3Rajshahi Medical College; 4Griffith University, Australia

Copy Number Variation and mRNA Expression of ERBB2 (HER2) Gene in Breast Cancer Samples from the North Bengal Region of Bangladesh

Introduction: Breast cancer development and progression are influenced by genetic and molecular alterations, including changes in the ERBB2 (HER2) gene, which encodes a receptor tyrosine kinase involved in cell growth and survival. Increased HER2 copy number and mRNA expression may contribute to tumour progression. However, regional data on HER2 copy-number variation (CNV) and mRNA expression in breast cancer samples from North Bengal, Bangladesh, remain limited. This study aimed to investigate HER2 CNV and mRNA expression patterns and evaluate their associations with clinicopathological characteristics, providing baseline regional molecular data for future research into breast cancer biology, diagnostic approaches, prognosis, and treatment response.

Methods: Formalin-fixed breast cancer tissues from 88 patients and 10 noncancerous breast tissues were collected from Rajshahi Medical College Hospital (RMCH). DNA and RNA were extracted using the TRIzol method, and RNA was reverse-transcribed into cDNA. HER2 DNA-CNV and mRNA expression were assessed using SYBR Green-based quantitative PCR (qPCR), with GAPDH as the internal reference. Clinicopathological associations were evaluated using SPSS version 26.0. A p-value below 0.05 was considered statistically significant.

Results: Among the 88 patients, ages ranged from 33 to 70 years, with a mean of 44.73 ± 7.67 years. High HER2 CNV was observed in 86.36% (76/88) of cancer samples, while low and unchanged CNV occurred in 7.95% (7/88) and 5.68% (5/88), respectively. High HER2 mRNA expression was detected in 51.13% (45/88), compared with low expression in 35.22% (31/88) and normal expression in 13.63% (12/88). Both HER2 CNV and mRNA expression were significantly higher in cancer than in noncancerous tissues ($p = 0.008$ and $p < 0.001$, respectively). HER2 CNV was associated with tumour size ($p = 0.04$), while mRNA expression was associated with tumour size and histological grade ($p = 0.02$ for both). A weak but statistically significant positive correlation was observed between HER2

CNV and mRNA expression (r = 0.28, p = 0.01).

Conclusion: HER2 CNV and mRNA expression showed distinct patterns and significant associations with selected clinicopathological characteristics in this North Bengal cohort. These findings provide baseline regional molecular data and support further investigation of HER2 alterations in breast cancer. Larger studies incorporating clinical outcomes and established HER2 protein or gene-amplification assessments are needed to determine their diagnostic and prognostic relevance.

Chandan Barai1, Nelofar Yasmin2, Md Abdul Auwal1, Rabeya Khatun2, Tasnima Kamal1, Md Rashel Mollah1, Al-Amin Hossain1, Azadur Rahman Bhuiyan1, Md Ashraful Islam1, Zinnat Ara Moni1, Asma Ul Husna Biswas1, Md Asadur Rahman3, Md Farhadul Islam1,4*

1Rajshahi University, Rajshahi, 2Institute of Biological Science, Rajshahi University, Rajshahi, 3Rajshahi Medical College, Rajshahi,4School of Medicine and Dentistry, Griffith University, Australia

Copy-Number Gain and Overexpression of TNF-α in Breast Cancer: Clinicopathological Correlates in Patients from North Bengal, Bangladesh

Introduction: Gene expression profiling can reveal molecular differences between normal and malignant breast tissue. Tumour necrosis factor-alpha (TNF-α) is a key pro-inflammatory cytokine in the breast tumour microenvironment. It is secreted by tumour-associated macrophages, stromal cells, and cancer cells, and it promotes tumour proliferation, progression, metastasis, and survival, which makes it an attractive therapeutic target. However, data on TNF-α copy number and expression in Bangladeshi breast cancer patients are limited. This study aimed to analyse TNF-α copy number variation (CNV) and mRNA expression in breast cancer tissue from patients in North Bengal, Bangladesh, and also to examine the correlation between CNV and mRNA expression, and to assess their association with clinicopathological parameters.

Methods: Formalin-fixed tissue samples were collected from 100 patients with histopathologically confirmed breast cancer, and 10 normal tissue samples served as controls. Twelve cancer samples were excluded for poor tissue quality, leaving 88 tumours for analysis. Nucleic acids were extracted by the TRIzol method. TNF-α CNV and mRNA expressions were measured by RT-qPCR with GAPDH as the reference gene. Tumours were classified into low, normal, and high expression groups and into low and high copy-number groups. Both measures were compared between tumour and normal tissue, correlated with each other and tested against clinicopathological parameters. A p value below 0.05 was considered significant. The study was approved by the Ethics Committee of the University of Rajshahi, and written informed consent was obtained from all participants.

Results: Patients were aged 33-70 years. Most tumours were histological grade 2 (70.5%) and stage IIIA (38.6%) or IIA (37.5%); 70.5% of patients had regional lymph-node involvement, 68.2% had tumour necrosis, and 37.5% had lymphovascular invasion. A high TNF-α copy number was found in 86 of 88 tumours (97.7%), and copy number was significantly higher in tumour than in normal tissue ($p = 0.005$). TNF-α mRNA was overexpressed in 46 tumours (52.3%),

normal in 17 (19.3%) and low in 25 (28.4%), and expression was significantly higher in tumour than in normal tissue ($p = 0.006$). Expression correlated positively with copy number ($r = 0.28$, $p = 0.01$). TNF-α expression was significantly associated with regional lymph-node involvement ($p = 0.04$): involvement rose from 52.0% in low expressers to 70.6% in normal and 80.4% in high expressers. mRNA expression was also associated with histological grade ($p = 0.02$) and stage ($p = 0.04$). Grade 1 tumours were concentrated in the low-expression group (20.0% vs 2.2% of high expressers), and stage IIB disease was more frequent among high expressers (28.3% vs 4.0%). Copy-number status was associated with lymphovascular invasion and regional lymph-node involvement (both $p = 0.04$). Neither expression nor copy number was associated with age, tumour size, tumour focality, or necrosis.

Conclusion: TNF-α copy-number gain is very common in breast tumours from the North Bengal region of Bangladesh, and about half of these tumours overexpress TNF-α mRNA. The modest positive correlation between copy number and expression suggests that copy-number gain contributes to TNF-α overexpression. The association of TNF-α expression with lymph-node involvement, histological grade, and stage links TNF-α to tumour progression. TNF-α may therefore serve as a prognostic marker and potential therapeutic target in this population. However, larger studies are needed to validate these findings.

Dr. Quazi Tasfia

National Institute of Burn & Plastic Surgery

Desmoid-Type Fibromatosis of the Male Breast Mimicking Breast Carcinoma: A case report

Introduction: Desmoid-type fibromatosis is a rare, locally infiltrative fibroblastic neoplasm with an estimated incidence of 5–6 cases per million people annually; breast involvement accounts for approximately 0.2–0.3% of breast tumours, and presentation in men is exceptionally uncommon. Its clinical and radiological features may mimic breast carcinoma, making preoperative diagnosis challenging. This is a case report of male breast desmoid-type fibromatosis that was initially suspected to be carcinoma and was later proved by core biopsy and post operative histopathology.

Methods: This is a case report of a 40-year old man who presented with history of progressively enlarging left breast swelling for last 8 months which was associated with occasional pain and got admitted in National Institute of Burn and Plastic Surgery, Dhaka, Bangladesh. All clinical findings, ultrasonographic assessment and postoperative histopathological findings were reviewed for the diagnosis and describe pathological characteristics of the lesion.

Results: Clinical examination revealed a 5 × 6 cm hard, irregular swelling with well-defined margins involving upper outer quadrant of the left breast. There was normal overlying skin, no discharge or retraction of nipples or palpable axillary lymphadenopathy. Based on the clinical features, left breast carcinoma was initially suspected. Ultrasonography of both breasts and axillae however indicated gynecomastia of left breast and fibromatosis was one of the few differential diagnoses. Core needle biopsy demonstrated fibromatosis. Hormonal investigations revealed elevated serum estrogen (161.94 pg/mL; laboratory upper reference limit 50 pg/mL) and low total testosterone (1.68 ng/mL; reference range 2.80–14.00 ng/mL). At the initial examination on 2 July 2024, the overlying skin was normal and the mass was free from the skin and underlying structures. Local excision was initially planned following the core biopsy diagnosis of fibromatosis. However, on the day of surgery, 20 July 2024, the overlying skin appeared inflamed, with skin fixation raising renewed suspicion of malignancy. Consequently, mastectomy with axillary sampling was performed. Histopathological examination revealed desmoid-type fibromatosis characterized by the presence of spindle cells grouped in long fascicles in a dense collagenous stroma. Atypia and mitotic activity were minimal in the cells

and no necrosis was found. The tumour was present in the breast adipose tissue, but there was no tumour in the nipple and areola. Superior, inferior, medial and lateral resection margins were clear, whereas the deep margin was close at 1 mm. All 7 axillary lymph nodes had reactive changes, but no evidence of malignancy was seen in the deep resection margin. At the one-month postoperative follow-up, the patient was clinically well.

Conclusion: Desmoid-type fibromatosis should be considered in the differential diagnosis of suspicious male breast masses because it can clinically mimic carcinoma. Correlation of clinical findings, imaging and histopathology is essential for accurate diagnosis and appropriate management. Given its locally infiltrative behaviour and potential for recurrence, assessment of resection margins and appropriate postoperative follow-up are important.

Md. Mashukur Rahman*, Tasmi Jyoti, Samanta Sayed, Farzana Binta Rahman, Sadia Sharmin, Syed Md. Akram Hussain

Bangladesh Medical University

Do Social Media Users Feel Better Informed About Breast Cancer Treatment? A Single-Center Cross-Sectional Study in Bangladesh

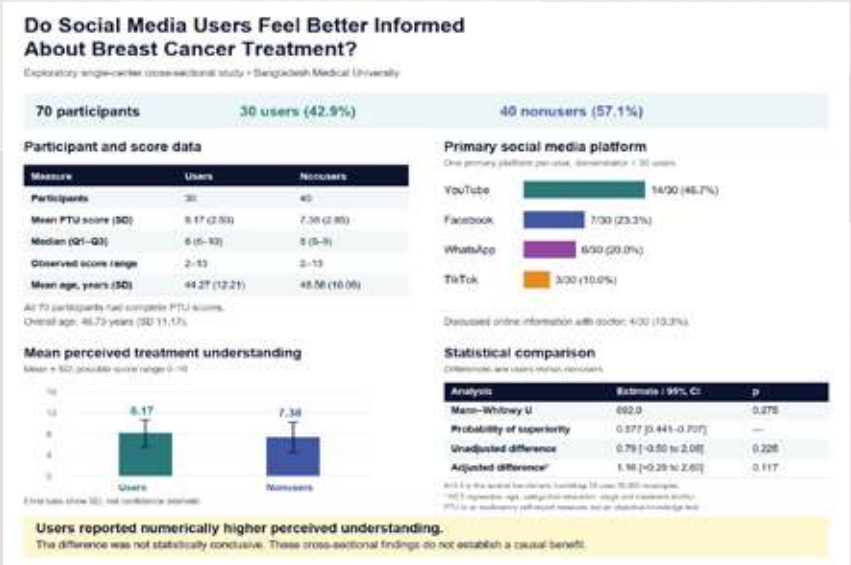
Introduction: Social media may supplement clinical information for patients with breast cancer; however, its relationship with perceived treatment understanding requires evaluation independent of objective knowledge and involvement in treatment decisions. This study sought to characterise cancer-related social media use and to compare perceived treatment understanding between users and nonusers at a tertiary oncology centre in Bangladesh. Previous reviews describe diverse patterns of online information seeking among breast cancer patients, influenced by education, digital access, and clinical context. A Bangladeshi mixed-cancer study has also described social media use and information-related concerns. However, these findings do not directly establish whether breast cancer patients who use social media feel better informed about their treatment. This study aimed to describe cancer-related social media use and compare perceived treatment understanding between users and nonusers at a tertiary oncology centre in Bangladesh.

Methods: This exploratory cross-sectional study enrolled 70 adult breast cancer patients who were interviewed at the Department of Clinical Oncology, Bangladesh Medical University, Dhaka, between 25 September and 5 October 2026. Social media information use was defined as utilising social media to obtain information about breast cancer or its treatment. Four investigator-developed self-report items assessed understanding of treatment rationale, expected benefit, important adverse effects, and the next treatment or follow-up plan. Each item was scored from 0 to 4, yielding a total score ranging from 0 to 16. The primary analysis employed a two-sided Mann–Whitney U test and probability of superiority (A), with a 95% confidence interval generated from 20,000 within-group bootstrap resamples. Sensitivity analyses included a Welch mean comparison and HC3-robust linear regression adjusting for age, education category, cancer stage, and treatment anchor.

Results: Among participants, 30 (42.9%) reported using social media for information, while 40 (57.1%) did not. The mean age was 46.73 years (SD 11.17). Among social media users, YouTube was the most frequently reported primary

platform (46.7%), followed by Facebook (23.3%), WhatsApp (20.0%), and TikTok (10.0%). Four users (13.3%) reported discussing online information with their physician. All participants provided complete outcome scores. Social media users reported a higher mean perceived treatment understanding than nonusers: 8.17 (SD 2.53) compared to 7.38 (SD 2.85), although both groups had a median score of 8. The Mann–Whitney comparison was not statistically significant (U=692.0; p=0.275), with a probability of superiority of 0.577 (95% bootstrap CI 0.441–0.707). The unadjusted mean difference was 0.79 points (95% CI −0.50 to 2.08; p=0.225). After adjustment, the estimated difference remained positive but imprecise at 1.16 points (95Social media users reported numerically higher perceived treatment understanding; however, neither unadjusted nor adjusted analyses demonstrated a clear association. The small single-center sample, use of an unvalidated self-report measure, and cross-sectional design limit interpretation and preclude causal inference. Larger studies using validated and culturally appropriate measures are warranted.

Conclusion: Social media users reported numerically higher perceived treatment understanding, but neither unadjusted nor adjusted analyses demonstrated a clear association. These findings do not support assuming that access to social media information translates into better treatment understanding. The small single-center sample, unvalidated self-report measure and cross-sectional design limit certainty and preclude causal inference. Larger multicenter studies using validated, culturally appropriate measures are needed to determine whether—and under what conditions—social media use is associated with better understanding of breast cancer treatment.



Nahida Sultana

Square Hospitals Limited

Dosimetric Comparison of Intensity Modulated Radiotherapy (IMRT) and 3DCRT Field-in-Field (FIF) Planning Techniques for Left Breast Carcinoma Treatment

Introduction: Radiotherapy plays a vital role in the management of left-sided breast carcinoma, where achieving optimal target coverage while minimising radiation exposure to adjacent organs at risk (OARs), particularly the heart and ipsilateral lung, remains a major clinical challenge. Deep Inspiration Breath Hold (DIBH) is an advanced respiratory motion management technique that increases the distance between the heart and the chest wall during treatment, thereby reducing cardiac exposure. In addition, DIBH selecting an appropriate radiotherapy planning technique is crucial for achieving optimal target coverage, dose homogeneity and conformity while minimising radiation exposure to organs at risk (OARs).

Methods: Treatment plans were generated and evaluated using the Varian Eclipse Treatment Planning System (version 18.0) for a Varian TrueBeam linear accelerator (version 03), equipped with a 120-leaf Millennium dynamic multi-leaf collimator (MLC). IMRT plans were developed using 6-MV photon beams, whereas 3DCRT-FIF plans were generated using 10-MV photon beams with a 0.5-cm bolus. DIBH was incorporated during treatment planning to facilitate cardiac sparing and reduce irradiation of adjacent normal tissues. The dosimetric comparisons were performed by evaluating the Planning Target Volume (PTV) dose distribution, Homogeneity Index (HI) and Conformity Index (CI).

Results: The dosimetric evaluation demonstrated that IMRT provided superior target dose homogeneity and conformity compared with 3DCRT-FIF. The average HI was 0.008 for IMRT compared with 0.082 for 3DCRT-FIF, indicating a more homogeneous dose distribution with IMRT. Similarly, the average CI was 1.022 for IMRT and 1.181 for 3DCRT-FIF, demonstrating better conformity of the prescribed dose to the target volume with IMRT. The mean heart dose was 3.79 Gy with DIBH, while the ipsilateral lung V20 was 19.05%. These findings highlight the importance of incorporating DIBH into left-sided breast radiotherapy to facilitate cardiac protection while maintaining adequate target coverage. However, a direct comparison of heart and lung dose parameters between the

two planning techniques is required to establish their relative OAR-sparing performance.

Conclusion: The findings indicate that IMRT provides better target dose homogeneity and conformity than 3DCRT-FIF for left-sided breast carcinoma. The incorporation of DIBH represents an important strategy for reducing cardiac exposure during left breast irradiation. The combination of advanced radiotherapy planning and DIBH may contribute to improved treatment quality by balancing target coverage with normal tissue protection.

Rofikun Nahar Rosmi

Gono University

Dosimetric Evaluation of TrueBeam HyperSight Imaging for Adaptive Radiotherapy Planning in Breast Cancer

Introduction: Accurate dose calculation is essential for effective radiotherapy treatment planning. Conventional cone-beam computed tomography (CBCT) has limitations in dosimetric accuracy due to scatter-related artifacts and inaccuracies in Hounsfield unit (HU) estimation. TrueBeam HyperSight CBCT (HS-CBCT), incorporating advanced iterative reconstruction algorithms, including iterative CBCT (iCBCT) and iterative CBCT with metal artifact reduction (iCBCT-MAR), may improve image quality and dose calculation accuracy. This study aims to evaluate the feasibility of using HyperSight imaging for adaptive radiotherapy treatment planning in breast cancer patients.

Methods: Ten breast cancer patients enrolled in a prospective clinical trial were included in the study. HyperSight CBCT images were acquired using two imaging protocols (HS-A and HS-B) at 125 kV, with 1.2 mAs and 0.3 mAs, respectively. The images were reconstructed using standard filtered back projection (FDK), iCBCT, and iCBCT-MAR algorithms. Treatment plans and anatomical structures from the original CT simulation (CT-sim) were transferred to the CBCT and HS-CBCT datasets following image registration. Dose distributions were recalculated, and dose-volume histogram (DVH) parameters were extracted. The evaluation focused on planning target volume (PTV) D95 and mean doses to the heart and lungs. Dosimetric differences between CT-sim and CBCT-based calculations were assessed using two-tailed paired t-tests.

Results: HyperSight CBCT demonstrated promising dosimetric performance compared with the original CT-sim. The mean difference in PTV D95 was 2.06 ± 4.75% for HS-A and 2.82 ± 6.01% for HS-B, with no statistically significant differences ($p = 0.11$ and $p = 0.10$, respectively). Mean heart dose differences were −0.12 ± 4.76 cGy for HS-A and 1.37 ± 5.89 cGy for HS-B, also without statistically significant differences ($p = 0.68$ and $p = 0.74$, respectively). Both HyperSight protocols demonstrated improved mean heart and lung dose representation compared with standard CBCT, although statistically significant differences in mean lung dose remained ($p = 0.03$ and $p = 0.04$ for HS-A and HS-B, respectively). The iCBCT-MAR reconstruction algorithm showed potential for improving HU accuracy and reducing image artifacts, particularly in cases

involving metal implants.

Conclusion: TrueBeam HyperSight CBCT demonstrated promising feasibility for dose calculation in breast radiotherapy, with acceptable agreement in target coverage and mean heart dose compared with CT simulation. Advanced reconstruction algorithms may further improve the reliability of CBCT-based dose calculations. These findings support the potential integration of HyperSight imaging into adaptive radiotherapy workflows for breast cancer patients. Further validation using a larger patient cohort is recommended before routine clinical implementation.

Shamsun Nahar[1]*, Sk Farid Ahmed[2], Warda Kamal Mollik[2], Khadiza Ahmed 3

[1] Department of Surgery, Ad-din Momin Medical College Hospital, Bangladesh [2] Department of Breast Surgery, Japan Bangladesh Friendship Hospital, Dhaka, Bangladesh

Effect of Postoperative Metformin on Seroma Formation Following Breast Surgery: A Prospective Comparative Study

Introduction: Postoperative seroma is one of the most frequent complications following breast and axillary surgery. Accumulation of serous fluid within the postoperative dead space may cause discomfort, delayed wound healing, repeated aspiration, prolonged drain use, infection and additional hospital or outpatient visits. Although several surgical strategies, including quilting sutures, flap fixation and appropriate drain management, have been investigated, clinically significant seroma remains common. Recent evidence supports mechanical reduction of dead space as one of the more effective preventive approaches. Metformin, an established oral antihyperglycemic drug, has also demonstrated anti-inflammatory, immunomodulatory and tissue-healing effects in experimental and translational studies. However, evidence concerning oral metformin for prevention of seroma after breast surgery remains insufficient.

Methods: This prospective comparative study was conducted from August 2025 to August 2026 among adult patients undergoing breast surgery. A total of 100 eligible patients were enrolled and allocated equally into a metformin group receiving metformin 500 mg twice daily after surgery and a control group receiving standard postoperative care without metformin. Seroma formation was assessed clinically and by ultrasonography when clinically indicated. The primary outcome was clinically significant in postoperative seroma requiring aspiration. Secondary outcomes included reduction in total seroma volume, number of aspirations, duration of drain placement, wound complications, length of hospital stay and adverse effects.

Results: Postoperative seroma requiring aspiration occurred in 8 (16.0%) patients in the metformin group compared with 17 (34.0%) patients in the control group ($p=0.045$). Clinically detectable seroma occurred in 12 (24.0%) patients in the metformin group and 23 (46.0%) patients in the control group ($p=0.022$). Mean cumulative aspirated seroma volume was significantly lower in the metformin group than in the control group (186.3±74.8 mL vs. 312.7±116.5 mL; $p<0.001$). Patients receiving metformin required fewer aspirations and had a shorter mean duration of drain placement. The mean number of aspirations was

1.6±0.7 in the metformin group compared with 2.4±1.0 in the control group ($p<0.001$), while mean drain duration was 6.2±1.7 days versus 7.5±2.1 days, respectively ($p=0.001$). No significant differences were observed in surgical-site infection, wound dehiscence, flap necrosis, hematoma, reoperation or readmission. Mild gastrointestinal adverse effects were more frequent among patients receiving metformin.

Conclusion: Postoperative metformin 500 mg twice daily was associated with a lower incidence of aspiration-requiring seroma, lower cumulative aspirated seroma volume, fewer aspiration procedures and shorter drain duration following breast surgery. Although these findings suggest a potential role for metformin as an adjunctive strategy for seroma prevention, larger randomized controlled trials are required to confirm its efficacy and establish its safety and clinical applicability.

Md. Anwarul Islam1, Rajada Khatun2, Moumita Chowdhury3, Md. Mokhlesur Rahman3

1Clinical Oncology, United Healthcare Services Limited, Dhaka, Bangladesh.
2Medical Physics Division, Atomic Energy Centre, Dhaka, Bangladesh.
3Department of Medical Physics and Biomedical Engineering

Evaluation of AAA Dose Calculation Sensitivity to High-Density Material Artifacts Using a CIRS Thorax Phantom

Introduction: High-density materials such as metallic implants can introduce CT artifacts and uncertainties in electron-density assignment, potentially affecting treatment planning system (TPS) dose calculation and monitor-unit (MU) estimation. This study evaluated the dosimetric impact of stainless steel (SS) and bone-equivalent material (BEM) in a thorax phantom.

Methods: A CIRS thorax phantom containing SS and BEM inserts was scanned using a GE LightSpeed 16-slice CT scanner at 120 kV and 200 or 400 mA with Standard and Bone reconstruction. Five phantom configurations were investigated using an IBA Farmer ionization chamber positioned at different locations relative to the high-density inserts. Six-MV AP/PA 3D conformal plans were generated in Eclipse v13.6 using the Anisotropic Analytical Algorithm (AAA). Original-material plans were compared with corresponding water-density reference plans while maintaining identical treatment geometry and prescription. Ionization-chamber measurements were performed using a TRS-398-based dosimetry procedure.

Results: SS produced substantially greater dosimetric effects than BEM. When the chamber was outside the insert, SS-related dose differences were approximately 3.5–3.8%, while differences increased to approximately 5.3–7.4% when the chamber was positioned within the high-density region. Relative to the water-density reference, SS produced dose differences of up to approximately 10%, whereas BEM generally showed much smaller differences. Similar material-dependent effects were observed in MU calculations. Variations in tube current and reconstruction technique produced comparatively smaller changes.

Conclusion: High-density material, particularly SS, can significantly influence TPS-calculated dose and MU, with the magnitude strongly dependent on the spatial relationship between the material and dose-scoring region. Appropriate CT density representation and experimental verification are therefore important when high-density materials are present within or near clinically relevant treatment regions.

Major Md Khairul Islam

Combined Military Hospital (CMH) Dhaka

Evaluation of Amplitude-Gated IMRT for Respiratory Motion Management in Right Breast Radiotherapy Using RGSC

Introduction: Respiratory induced chest wall movement during breast radiotherapy can introduce positional uncertainty and compromise target localization. To account for this motion, larger clinical target volume (CTV)-to-planning target volume (PTV) margins may be required during free-breathing treatment, potentially increasing the irradiated volume and dose to surrounding organs at risk (OARs). Respiratory Gating for Scanners (RGSC) system enables respiratory amplitude monitoring and gated radiation delivery within a predefined motion window.

Methods: A comparative treatment planning evaluation was performed for right breast radiotherapy using free-breathing and RGSC-based amplitude-gated IMRT. Respiratory-related chest wall motion was considered when defining target margins. The planning target volume (PTV), total irradiated volume, ipsilateral lung V20, ipsilateral lung mean dose (Dmean), and heart Dmean were compared between the two techniques. The PTV volume was 1337 cc for free-breathing IMRT and 1196.25 cc for amplitude-gated IMRT.

Results: Compared with free-breathing IMRT, amplitude-gated IMRT reduced PTV volume by 10.5% and total irradiated volume by 24.3%. Ipsilateral lung V20 decreased by 8.64 percentage points, representing a relative reduction of 28.2%. Ipsilateral lung Dmean decreased by 23.5%, from 17 Gy to 13 Gy. Heart Dmean decreased by 40.6%, from 4.21 Gy to 2.5 Gy. These findings demonstrate a substantial reduction in the volume of normal tissue exposed to radiation and improved dosimetric sparing of the ipsilateral lung and heart with amplitude-gated planning.

Conclusion: RGSC-based amplitude-gated IMRT demonstrated dosimetric advantages over free-breathing IMRT for right breast radiotherapy, including reduced PTV and irradiated volumes and lower doses to the ipsilateral lung and heart. Respiratory amplitude monitoring may help account for chest wall motion and reduce the need for larger motion-related PTV margins in appropriately selected patients. Further evaluation of respiratory reproducibility, setup uncertainty, target coverage, and intrafraction motion is necessary to establish the clinical safety and generalizability of this approach.

Md Mokhlesur Rahman

Gono University

Evaluation of Short-Arc CBCT-Based Image Registration Accuracy in Breast Cancer Radiotherapy

Introduction: Image-guided radiotherapy (IGRT) relies on cone-beam computed tomography (CBCT) to achieve accurate image registration and patient positioning. However, the additional radiation exposure associated with CBCT imaging remains a concern. Short-arc CBCT (SA-CBCT), which uses a reduced number of projection images for image reconstruction, has recently emerged as a potential alternative to conventional CBCT. Although previous research has reported a decline in image quality with reduced projection data, the clinical utility of SA-CBCT and its impact on registration accuracy have not been directly established. This study aimed to assess the registration accuracy of SA-CBCT for tangential breast irradiation using both an anthropomorphic phantom and clinical patient data. Its clinical feasibility was investigated by comparing its performance with that of the conventional 200° CBCT acquisition protocol.

Methods: An anthropomorphic phantom was positioned on the radiotherapy treatment couch, and registration was performed between the planning CT and CBCT images. Couch shifts obtained using conventional CBCT and SA-CBCT were measured and compared. Registration accuracy was quantified using N, defined as the Euclidean norm of the vector difference between the registration shifts obtained from the two imaging methods. The effects of the central and total acquisition angles were evaluated. For the clinical assessment, registration data from 30 consecutive patients receiving whole-breast irradiation were analyzed. CBCT datasets were reconstructed using progressively reduced acquisition angles, ranging from 200° to 120°. The registration discrepancy N was calculated using the same approach as in the phantom experiment.

Results: In the phantom study, reducing the acquisition angle to 120° resulted in registration discrepancies of no more than 0.15 mm for three-axis registration and 0.55 mm for six-axis registration. In the clinical evaluation, the mean registration discrepancies were 0.64 mm for three-axis registration, with 84.7% of cases showing discrepancies within 1 mm, and 0.85 mm for six-axis registration, with 71.3% within 1 mm. Despite the reduced acquisition angle, the

body contour and chest wall boundaries remained sufficiently visible for registration purposes.

Conclusion: Short-arc CBCT demonstrated promising registration accuracy for image-guided tangential breast irradiation, even when the acquisition angle was reduced to 120°. The preservation of essential anatomical features and the relatively small registration discrepancies indicate its potential as a clinically feasible alternative to conventional CBCT. Appropriate selection of acquisition parameters is necessary to maintain reliable image registration while potentially reducing imaging radiation exposure.

Zaman Ummay Humayra

Ahsania Mission Cancer & General Hospital

Expanding Surgical Choices in Breast Cancer: A Five-Year Experience from a Private Cancer Centre.

Introduction: Breast cancer surgery now extends beyond mastectomy to include breast-conserving surgery (BCS), oncoplastic reshaping and post-mastectomy reconstruction. In settings where resources, affordability and access to specialist services can constrain treatment choices, patients may not always be aware of the full range of appropriate surgical options. Individualized planning is therefore central to offering care that reflects disease characteristics and patient preferences. The objective of the study was to To describe the range of surgical approaches used in a five-year, single-surgeon series at a private-sector cancer centre in Bangladesh, with particular attention to breast conservation and immediate autologous reconstruction.

Methods: This retrospective descriptive review included 200 patients who underwent surgery for breast cancer at Ahsania Mission Cancer & General Hospital, Dhaka, between July 2020 and June 2025. Procedures were grouped as BCS or mastectomy. Mastectomy cases were further classified by whether immediate reconstruction was performed and by autologous flap type. The BCS cohort also included a range of volume-displacement oncoplastic techniques, for which technique-specific data are available for separate analysis. No implant-based or delayed reconstruction was performed in this series.

Results: Among 200 patients, 68 (34.0%) underwent BCS by several oncoplastic procedures and 132 (66.0%) underwent mastectomy. Of the 132 mastectomy patients, 27 (20.5%) received immediate reconstruction and 105 (79.5%) had no reconstruction. All 27 reconstructions used autologous tissue: 14 TRAM flaps (51.9%), 9 latissimus dorsi flaps (33.3%) and 4 DIEP free flaps (14.8%).

Conclusion: This single-centre experience illustrates a range of surgical options in routine breast cancer practice, including breast conservation and immediate autologous reconstruction. Mastectomy is not the only possible pathway for every patient; careful assessment, informed discussion and multidisciplinary decision-making can help align surgery with each patient's clinical needs and preferences. Wider access to breast-preserving and reconstructive approaches

may require continued investment in patient counselling, oncoplastic training, diagnostic and pathology services, coordinated oncology care and affordable treatment pathways. These descriptive data do not establish comparative effectiveness or allow direct comparison between public-and private-sector services. Implant-based and delayed reconstruction remain areas for future service development.

1. Farzana Binta Rahman, 2. Sumon M M, 3. Halima U, 4. Akhter F, 5. Sultana L, 6. Das A, 7. Reza S, 8. Hussain SMA

1. Bangladesh Medical University, Dhaka, Bangladesh, 2. Evercare Hospital Dhaka, 3. Square Hospitals LTD, 4. Light House international school

Fear of Cancer Recurrence among the Women with Breast Cancer Attending a Tertiary Hospital of Bangladesh

Introduction: Many women with breast cancer are afraid that the cancer will come back. This is called fear of cancer recurrence (FCR). Very little is known about it in Bangladesh. To Assess the level of FCR and examine its associated factors among women with breast cancer. attending a tertiary hospital in Dhaka

Methods: This was a cross-sectional study done at the Department of Oncology, Square Hospitals Ltd., Dhaka, in November 2025. 101 women were interviewed with a questionnaire. It had questions on background and treatment cost and the nine-item Fear of Cancer Recurrence Inventory – Short Form (FCRI-SF). The score ranges from 0 to 36. A score of 13 or more was used as the threshold for elevated FCR (a screening threshold, not a diagnosis).

Results: The mean FCRI-SF score was 16.5 (SD 6.9). Elevated FCR was found in 72 women (71.3%). Most women were 50 years or older (78.2%) and housewives (75.2%). More than half (55.4%) had spent more than 5 lakh taka on treatment, and 37.6% paid by loan or by selling assets. No significant difference in score was found by age, occupation, income or total expense. The score differed by education ($p < 0.001$) and by source of income ($p < 0.001$). In a multiple regression adjusted for age, education, occupation, income and total expense, women who paid by loan or by selling assets (combined) scored 5.7 points higher than women who paid by themselves or with help from relatives ($p = 0.003$). The other women (5.0%) were helped by relatives. The study is limited by its single-centre design, small sample and the scoring check described in the Methods

Conclusion: Elevated fear of cancer recurrence was common among the women in this single-centre study. The findings show a need for further research on FCR and its relation to difficulty in paying for treatment and for evaluation of suitable psychosocial support in breast cancer follow-up.

Md Zillur Rahman

Bangladesh Medical University

Fluorescence in Situ Hybridization HER 2 Amplification Status among Immunohistochemistry 2+ (Equivocal) Breast Carcinoma Patients of Bangladesh: A Series of 75 Cases

Introduction: Abstract Background Accurate determination of HER2 status in breast carcinoma is essential for guiding targeted therapy and improving patient outcomes. While immunohistochemistry (IHC) is commonly used as an initial screening method, equivocal (2+) IHC results always require confirmation through fluorescence in situ hybridization (FISH). However, data on Fluorescence in Situ Hybridization HER 2 Amplification status among Immunohistochemistry 2+ (Equivocal) breast carcinoma patients of Bangladesh remain limited, despite its significance in ensuring appropriate treatment planning. Objective: This study aimed to determine the Fluorescence in Situ Hybridization HER 2 Amplification status among Immunohistochemistry 2+ (Equivocal) Breast Carcinoma Patients of Bangladesh.

Methods: Materials and Methods: This retrospective observational study was conducted in the Department of Pathology in Ahsania Mission Cancer and General Hospital (AMCGH), Uttara, Dhaka, Bangladesh, from January 2024 to June 2025. The consecutive sampling technique was used and a total of 75 IHC-tested equivocal or borderline (2+) cases were retrospectively employed in this study. Breast tissue specimens were obtained via mastectomy (n=10), and core needle biopsy (n=65), processed into formalin-fixed paraffin-embedded (FFPE) blocks, and analyzed following ASCO/CAP guidelines (2018). FISH analysis was performed on all cases (N=75) to assess HER2 gene amplification. Then the data were extracted and analyzed using Statistical Package for Social Sciences (SPSS), version 23.0.

Results: A total of 75 cases of invasive breast carcinoma with equivocal (IHC 2+) HER2 expression were analyzed. The mean age of patients was 48.3 ± 11.1 years (median 46; range 28–88 years), with the highest proportion in the 38–47-year age group (36.0%). Most specimens were obtained by core needle biopsy (86.6%), while 13.3% were mastectomy specimens. Histologically, all tumors were invasive ductal carcinoma (NST). Grade II tumors predominated (72.0%), followed by Grade III (17.3%) and Grade I (10.6%). Hormone receptor analysis showed estrogen receptor positivity in 60.0% and progesterone receptor

positivity in 45.3% of cases. A high Ki-67 proliferation index (>15%) was observed in 73.3% of tumors. FISH analysis demonstrated HER2 gene amplification in 4 of 75 cases (5.3%), whereas 71 cases (94.7%) were non-amplified despite initial IHC 2+ classification. The exact 95% confidence interval for the amplification rate was 1.5% -13.0%. These findings reinforce the necessity of mandatory hybridization testing for accurate HER2 classification in equivocal cases to ensure appropriate allocation of HER2-targeted therapy.

Conclusion: This study demonstrates that only a small proportion of IHC 2+ breast carcinomas show true HER2 amplification. These findings reinforce the unconditional requirement for hybridization testing in all equivocal cases, particularly in settings where reflex testing may not yet be consistently implemented. Strengthening quality-assured HER2 diagnostics will be essential for advancing precision oncology and optimizing therapeutic resource allocation in Bangladesh.

Dr. Nishat Tasnim

250 Bedded Mohammad Ali Hospital, Bogura

Free Breathing versus Deep Inspiration Breath Hold Technique in Post-mastectomy Radiotherapy for Left Sided Breast Cancer: A Dosimetric Comparison of Target Volumes, Heart and Left Lung

Introduction: Radiotherapy (RT) is an important part of treatment for breast cancer. But it may cause late cardiac and pulmonary toxicities, especially in left sided cases due to proximity to these vital organs. Deep inspiration breath hold (DIBH) is a newer RT technique that can reduce radiation dose to the heart and lungs compared with free breathing (FB) without compromising target coverage.

Methods: This quasi-experimental study was conducted at Bangladesh Medical University (BMU) and Combined Military Hospital (CMH), Dhaka, from August 2024 to September 2025. Fifty women with left sided invasive breast cancer requiring PMRT with regional nodal irradiation (RNI) were enrolled and equally divided into Arm A (FB) and Arm B (DIBH). All of them received 4005 cGy in 15 fractions over three weeks by intensity-modulated RT (IMRT) technique. Dose-volume histograms (DVH) and statistical graphs for PTV, heart, and left lung were analyzed from treatment planning system (TPS).

Results: DIBH significantly reduced cardiac and pulmonary doses compared to FB mainly by increasing intervening lung volume ($p < 0.001$). For the heart; Dmean, Dmax, and V25Gy were all lower in DIBH ($p < 0.001$). Left lung Dmean and V20Gy were also significantly reduced ($p = 0.003$ and < 0.001, respectively). No significant difference was observed in PTV dosimetry between the two techniques. Univariate analysis showed left lung volume as most important predictor of cardiopulmonary sparing. Regression model explained 64.4% of the variance in mean heart dose (MHD) and 14.5% of the variance in mean left lung dose (MLLD) with left lung volume.

Conclusion: DIBH technique results in a remarkable decrease in cardiac and ipsilateral pulmonary doses than FB technique during PMRT for left sided breast carcinoma cases while maintaining equivalent PTV coverage.

Mostakim Maria Alievna, Assistant Professor of Plastic Surgery

NIBPS

From Defect Coverage to Microsurgical Breast Reconstruction: An Experience with Flap-Based Solutions after Mastectomy in Bangladesh

Introduction: Post-mastectomy reconstruction encompasses a spectrum of procedures, from flap coverage of the defect not suitable for primary closure to restoring breast volume. Plastic surgical techniques offer options of immediate and delayed breast reconstruction, NAC reconstruction, contralateral breast symmetrization. This experience aims to present a spectrum of flap-based reconstruction following mastectomy, including defect coverage, breast volume restoration, the initial experience with deep inferior epigastric perforator (DIEP) flaps and it highlights the evolving role of plastic surgery in post-mastectomy care in Bangladesh.

Methods: An illustrative case series was compiled using clinical photographs and available patient records. The cases demonstrate a range of pedicled and free-flap techniques, including thoracoabdominal flap, latissimus dorsi (LD) flap, axillary flap, transverse rectus abdominis myocutaneous (TRAM) flap and deep inferior epigastric perforator (DIEP) free-flap reconstruction.

Results: The cases represent diverse reconstructive objectives: coverage of defects unsuitable for primary closure, reconstruction following repeated resections for recurrent disease with chest-wall involvement, breast volume restoration using LD flaps in combination with an implant or fat grafting, NAC reconstruction, symmetrization, immediate and delayed breast reconstruction by autologous free flap (DIEP). The three DIEP cases provide an account of early experience in microsurgical breast reconstruction in our practice. Two flaps survived despite significant perioperative challenges, including intraoperative re-anastomosis in one case, postoperative flap hematoma and ecchymosis, and marginal flap and donor-site wound complications. The third flap developed failure after postoperative day four. These cases highlighted the technical demands of microsurgery and the importance of vigilant monitoring and complication management and continued team training.

Conclusion: Our experience demonstrates the complementary roles of pedicled and free flaps in a resource-constrained setting and reflects the initial development of DIEP reconstruction. Greater awareness of reconstructive options and multidisciplinary collaboration may help integrate plastic surgery more effectively into breast cancer care and expand future reconstructive opportunities.

Dr Ali Nafisa

Labaid Cancer Hospital & Super Speciality Centre

From Diagnosis to recovery: The Breast Centre Pathway & Advances in Oncoplastic Breast Surgery in Bangladesh

Introduction: Breast cancer care is evolving in Bangladesh, with increasing emphasis on early diagnosis, breast conservation, oncoplastic surgical techniques, and patient-centred multidisciplinary management. Dedicated breast units can facilitate coordinated care from initial assessment and diagnostic investigations to definitive treatment and follow-up. To describe the clinical pathway, surgical experience, and evolving breast-conserving and oncoplastic surgical practices at a dedicated breast unit in Bangladesh.

Methods: This abstract presents clinical experience and service data reported by the Breast Centre at Apollo JMI Clinic, including diagnostic pathways, image-guided localisation of non-palpable breast lesions, breast-conserving surgery (BCS), sentinel node biopsy (SNB), and oncoplastic breast surgery. The presentation also reports experience with 747 patients with non-palpable breast lumps evaluated between December 2018 and June 2023, alongside selected cases of minimal-access breast surgery and level II oncoplastic procedures.

Results: The reported experience demonstrates the feasibility of integrating image-guided diagnosis, wire-guided and ultrasound-guided wide local excision, therapeutic mammoplasty, and immediate implant-based reconstruction into breast cancer care. Among 747 patients evaluated for non-palpable breast lumps, 512 underwent core biopsy, and 152 malignant cases were reported. In a series of 19 patients undergoing level II oncoplastic breast surgery, all patients had clear surgical margins, and satisfactory cosmetic outcomes were reported. The presentation also describes the use of BCS with SNB in clinically node-negative patients. These approaches support a shift towards less extensive surgery where clinically appropriate, while maintaining oncological principles.

Conclusion: A dedicated breast unit can strengthen the delivery of coordinated, evidence-based breast cancer care in Bangladesh. Breast-conserving surgery and sentinel node biopsy are important components of less extensive surgical

management for appropriately selected patients. With increasing public awareness, earlier presentation, improved diagnostic access, and greater availability of trained breast surgeons and specialised services, the use of BCS and SNB is expected to expand further. Continued development of multidisciplinary breast units may improve access to appropriate surgical options and support better functional and cosmetic outcomes for patients.

Dr. Umme Humyra Kaneta, Dr. AKM Minhaz Bhuiyan, Dr. Hasan Shahriar Md. Nuruzzaman, Dr. Mushtaque Ahmed Jalali

National Institute of Cancer Research & Hospital, Dhaka, Bangladesh

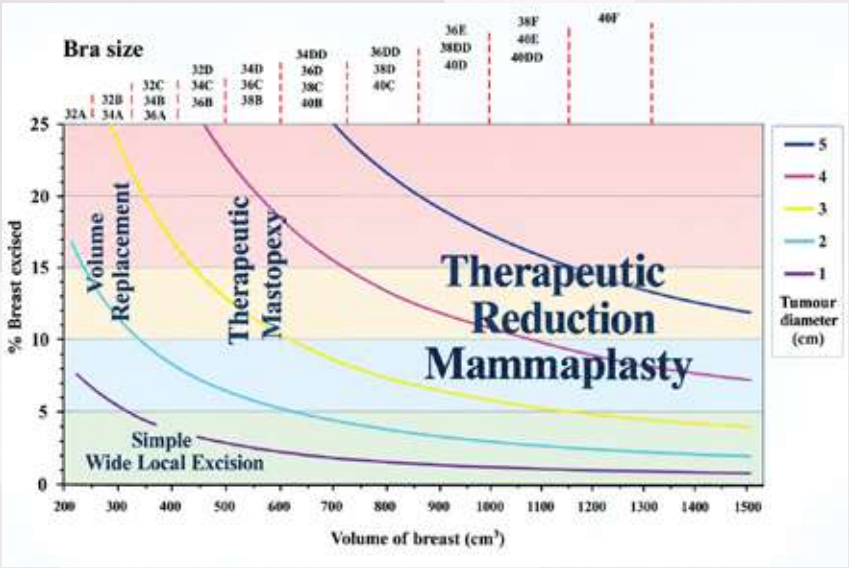
How Much Breast Can We Safely Take? Percentage of Breast Volume Excision as an Objective Guide to Cosmetic Outcome in Oncoplastic Breast Surgery

Introduction: The choice of oncoplastic breast surgery (OPBS) technique is often based on subjective assessment of breast size and the anticipated surgical defect. Quantifying the proportion of breast tissue removed may provide an objective basis for surgical planning and help anticipate cosmetic outcomes. This study evaluated the relationship between percentage breast volume excision (PBVE) and postoperative cosmesis.

Methods: This prospective observational study included 82 breast cancer patients undergoing OPBS at National Institute of Cancer Research and Hospital, Mohakhali, Dhaka, between July 2023 and December 2024. Preoperative breast volume was estimated using anthropometry and tumor diameter by ultrasonography. Pre-operative prediction of PBVE was made using a pre-setted chart. Following tumour excision with adequate margins, fresh specimen weight was recorded and PBVE was calculated using the preoperative breast volume. Patients were categorized into Level I (<20%), Level II (20–50%) and Level III (>50%) excision groups. Postoperative cosmetic outcome was assessed using a standardized scoring system.

Results: The mean preoperative breast volume was 599.76 cc. Sixty-six patients (80.5%) underwent Level I, 12 (14.6%) Level II and 4 (4.9%) Level III excision. Cosmetic scores ranged from 7–16, with 78.1% of patients achieving good-to-excellent cosmesis. Good-to-excellent cosmetic outcomes were observed in 58/66 patients (87.9%) in the Level I group and 10/12 (83.3%) in the Level II group. Overall, PBVE category was significantly associated with cosmetic outcome ($p<0.001$).

Conclusion: PBVE offers a simple quantitative framework for relating the extent of breast tissue excision to postoperative cosmetic outcome. Incorporating PBVE into OPBS planning may reduce reliance on subjective assessment and support more consistent selection of oncoplastic techniques. In LMIC settings, this low-cost approach may provide a practical tool for objective surgical planning while integrating oncological and aesthetic considerations.


Bra size
32A
32B
34A
32C
34B
36A
32D
34C
36B
34D
36C
38B
34DD
36D
38C
40B
36DD
38D
40C
36E
38DD
40D
38F
40E
40DD
40F
% Breast excised
25
20
15
10
5
0
Volume Replacement
Therapeutic Mastopexy
Therapeutic Reduction Mammaplasty
Simple Wide Local Excision
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
Volume of breast (cm³)
5
4
3
2
1
Tumour diameter (cm)

Md. Arifur Rahman1*, Ayasha Shiddika2, Mesbah Hasin3, Ferdous Ara Begum4, Mashud Parvez5, Sharmin Akter Rupa6, Salma Sultana7, Qamruzzaman Chowdhury1

Bangladesh Specialized Hospital PLC

Impact of a Structured Multidisciplinary Tumour Board on Staging, Treatment Planning and Breast Conservation in Newly Diagnosed Breast Cancer: Interim Analysis from a Tertiary Centre in Bangladesh

Introduction: Multidisciplinary tumour boards (MDTs) are recommended standard of care for breast cancer, but evidence of their impact on management in South Asian, resource-constrained settings is limited. We evaluated how a structured breast MDT influenced staging, treatment intent, surgical planning and neoadjuvant pathways in newly diagnosed breast cancer at a tertiary centre in Bangladesh.

Methods: This retrospective analysis of a prospectively maintained institutional registry included consecutive patients with newly diagnosed, biopsy-proven breast cancer discussed at the Bangladesh Specialized Hospital breast MDT between November 2022 and September 2025. The board comprised a breast surgeon, radiologist, pathologist, medical oncologist, radiation oncologist and clinical oncologist, with cardiology, diabetology and anaesthesia input when needed. Standard work-up included bilateral ultrasound, mammography, core biopsy of all suspicious breast and axillary lesions, and ER/PR/HER2/Ki-67 immunohistochemistry; the MDT advised breast MRI, PET-CT, bone scan, genetic testing or pathology review when needed. Endpoints were the recommendation of additional investigation, stage migration, newly detected bilateral or metastatic disease, the category of MDT decision, surgical-plan modification, conversion to breast-conserving surgery (BCS), adherence and pathological complete response (pCR; ypT0/is ypN0) after neoadjuvant chemotherapy (NACT). Proportions were calculated using patients with each variable recorded as the denominator. Data entry is ongoing; this is an interim analysis.

Results: Of 263 patients (median age 52 years, range 25–82; 32.3% premenopausal), 63.6% presented with stage II disease, 10.7% with stage III and 12.4% with stage IV. The molecular subtypes were luminal B HER2-negative (28.0%), triple-negative (26.3%), luminal A (22.8%), luminal B HER2-positive (15.9%) and HER2-enriched (6.9%). A median of six specialties attended each discussion, and the full core quorum was present in 67.9%. The MDT recommended additional investigation in 204 of 262 patients (77.9%), most

often multimodality imaging. Among 135 patients with complete MDT-impact documentation, 15 of 131 assessable cases (11.5%) had stage migration (9 upstaged, 6 downstaged), and distant metastasis was newly detected in 14 of 129 (10.9%). Suspicious bilateral disease was identified in 15 of 131 (11.5%). The MDT's decisions fell into these categories: curative-intent multimodality treatment (63.7%), further work-up before treatment (14.8%), palliative intent (11.9%), surgery brought forward (5.9%) and escalation of systemic therapy (2.2%). The surgical plan was modified in 119 of 134 patients (88.8%), and 70 of 119 eligible patients (58.8%) were directed to a breast-conservation pathway. Of 115 patients whose adherence could be assessed, 106 (92.2%) were treated as recommended. The median interval from MDT to first treatment was 9 days (IQR 4–17). Sixty patients received NACT, with hydrogel marker placement in 67.3%. pCR was achieved in 19 of 48 evaluable patients (39.6%): 56.3% in triple-negative disease and 53.3% in HER2-positive disease. Of 128 operated patients, 86 (67.2%) underwent BCS, including 35 of 53 (66.0%) after NACT.

Conclusion: In this interim analysis, structured MDT review frequently prompted additional investigation, refined staging in about one in nine patients and identified previously unrecognised metastatic disease in about one in ten. It also shaped surgical strategy, achieving a breast-conservation rate approaching two-thirds, including after NACT. Adherence to MDT recommendations was high, and the time from board to treatment was short. These findings support routine multidisciplinary review for every newly diagnosed breast cancer in Bangladesh. Completion of the full 2019–2026 cohort will allow assessment of locoregional control, cosmesis and survival outcomes.

M. Motiur Rahman1,2, Ayesha Siddika Borna2,3, M. Fajle Rabby2, 3, Abdul Kader Zilani3, A.Z.M. Sumsuzoha, AKM Ahsan Habib1.

1Department of Radiation Oncology, TMSS Cancer Center (TCC), Bogura, Bangladesh. 2Department of Physics, Rajshahi University (RU), Rajshahi, Bangladesh. 3Department of Physics, Rajshahi University of

Impact of Breast Volume on Dose Distribution and Treatment Planning Quality in Breast Cancer Radiotherapy Using Helical Tomotherapy: A Retrospective Dosimetric Study

Introduction: Breast volume is a factor for women with breast cancer. It can affect how radiation is spread during treatment. Different sizes and shapes of the breast can change how well the radiation hits the target area and how much it affects tissue around it

Methods: This study looked at how breast volume affects the way radiation is given to breast cancer patients using helical tomotherapy. This retrospective dosimetric included 20 breast cancer patients (10 left breast and 10 right breast cancer patients) previously treated with helical tomotherapy.

Results: Planning target volume (PTV) and dosimetric parameters, including D95%, D98%, D2%, V95%, V105%, V107%, homogeneity index (HI), and conformity index (CI), were evaluated to assess target coverage and dose distribution. Mean heart dose, contralateral breast and ipsilateral lung dose-volume parameters were analysed to evaluate OAR sparing. Increasing volume increases the homogeneity index and conformity index greatly. By fixing the contralateral lung below 4 Gy, we obtained a mean heart dose of 7.0 Gy and an ipsilateral lung dose of 13.2 Gy. A large effect of hot spots on breast volume is prominent in dose distribution, where hotspot 107% was found in 0.2 cc volume for maximum PTV volume 1286.49 cc, besides 0.0 cc for smaller volume 582.65. Correlation analysis was performed to evaluate the relationships between PTV volume and various dosimetric parameters, including HI, CI, target dose coverage, hotspot distribution and OAR doses.

Conclusion: This study provided an insight into the influence of breast volume on target dose distribution, dose homogeneity, and OAR sparing in helical tomotherapy-based breast cancer radiotherapy treatment planning. The results may help to find differences in the way treatment is planned and support personalised radiation plans.

Prof. A. K. Mostaque, Senior Consultant, Department of Surgical Oncology, Ahsania Mission Cancer and General Hospital, Uttara, Dhaka-1230, Bangladesh. Prof. A. M. M. Shariful Alam, Senior Consultant, Department of Clinical Oncology, Ahsania Mission Cancer and General Hospital, Uttara, Dhaka – 1230, Bangladesh.

Ahsania Mission Cancer and General Hospital

Ipsilateral Proactive Oncoplastic Enlargement of the Breast and Prognostic Stratification of Lymph Node Ratio after Axillary Dissection – A Prospective Study

Introduction: Axillary lymph node dissection (ALND) maintain therapeutic values by removing regional tumor bulk, accurately counts positive lymph nodes (LNs), and guiding treatment stratification - ultimately improving longevity in high-risk breast cancer (B) patients. Standard level-2 oncoplastic surgery (OPS) balances the cancer-affected breast mastopexy using a matching procedure on healthy breast (symmetrization mastopexy), typically assuming ALND is irrelevant. However, operating on a healthy breast is ethical concerns regarding non-maleficence, highlighting the need to de-escalate this invasive symmetrization. To address this, we propose a paradigm shift: Skin-sparing OPS with concomitant ipsilateral ALND (Novel OPS). This technique naturally balances the reconstructed breast's volume and elevation over time, helps standardize level-2 OPS by naturally balancing the volume and elevation of the reconstructed breast over time, achieving symmetry in shape, size and degree of ptosis compared to un-operated breast. By removing the need for healthy breast mastopexy, Novel OPS resolve the tension between aggressive oncologic resection and protecting healthy organs, standardizing level-2 OPS without unnecessary contralateral surgery. ALND-derived lymph node ratio (LNR) may provide a stronger prognostic indicator than pathological node (pN) staging potentially identifying high-risk patients within lower pN stages who require aggressive adjuvant therapies to improve disease free-survival (DFS) and overall survival (OS). This study aimed to: (1) evaluate efficacy and long-term outcome of Novel OPS, and (2) compare the accuracy of prognostic and patient stratification power of pN staging and LNR sub-grouping following ALND.

Methods: This single-center prospective cohort study was conducted on 51 consecutively treated BC patients including three patients treated with Novel OPS. The number of novel OPS was restricted because of integration of ALND in level-2 OPS. The novel OPS procedure were oncologic resection of the BC performed through double dough-nut periareolar incisions, de-epithelialization in between incisions with mean 30% breast tissue excision, and ipsilateral axillary fibro-fatty tissue dissection containing level-1 and 2 LNs to assess

total/positive node counts, pN stages, and ALND-derived LNR subgroupings. Postoperative evaluation included loco-regional recurrence, lymphedema, patient reported cosmetic satisfaction and psychosocial quality of life. DFS and OS survivals were calculated at follow-up date focusing on the high-risk cases either of pN stages or LNR subgroups where all patients eventually died (on December 2022 follow-up) to understand their full survival trajectory.

Results: Of the 51 patients, 48 (94.1%) underwent modified radical mastectomy and 3 (5.9%) a novel OPS. The OPS cohort demonstrated recurrence-free survival with balanced, healthy, and symmetrical breasts at >7 years of follow-up. Median DFS and OS for the entire cohort were 49.23 and 52.63 months, following deaths of all high-risk LNR subgroup. Patient stratification differed significantly between the pN and LNR subgroups ($p < 0.001$). Estimated mean DFS was differed significantly when comparing low-vs. high-risk LNR ($p < 0.001$) and intermediate-vs. high-risk LNR ($p < 0.001$) against the standard pN stages. Similarly, OS differences between low-vs. high-risk ($p < 0.001$) and intermediate-vs. high-risk ($p < 0.001$) LNR subgroups were highly significant and superior to pN stage stratification. Univariate Cox regression analysis indicated that LNR and LNR-subgroups are independent prognostic factors.

Conclusion: Novel level-2 oncoplastic surgery with concomitant ipsilateral axillary lymph node dissection is an effective and proactive procedure that achieves natural breast symmetrization by utilizing the favorable physiological volume changes (i.e., organization of lymphedema) of the treated side, eliminating the need for contralateral healthy breast surgery. Furthermore, axillary lymph node dissection-derived lymph node ratio serves as a robust prognostic indicator and independent predictor in breast cancer and provide superior risk stratification crucial for tailoring adjuvant therapies. Routine implementation of ipsilateral axillary dissection provides a powerful dual-purpose benefit: spontaneous cosmetic symmetrization and precise prognostic stratification.

Aditi Paul Chowdhury

Ahsania Mission Cancer and General Hospital

Knowledge, Awareness and Barriers to Breast Cancer Genetic Testing among woman with positive family history: A Cross-Sectional Study

Introduction: Genetic testing enables early identification and preventive strategies for women who are at risk of developing breast cancer. However, public awareness and access to clinical genetics remain limited in Bangladesh. This study evaluated genetic literacy, prior counseling exposure, readiness to undergo testing, and perceived barriers among women with a family history of cancer.

Methods: A cross-sectional survey was conducted among 500 women attending Ahsania Mission Cancer & General Hospital (AMCGH) who reported a family history of breast cancer. Structured face-to-face interviews captured demographic factors, general screening knowledge, counseling history, testing uptake, and specific obstacles to genetic evaluation.

Results: The average age of participants was 33 years (17–72 years). While 66.0% had heard of general breast cancer screening methods, only 10.6% (n = 53) had prior exposure to genetic counseling, Despite this low exposure, 60.6% ($n = 303$) stated they would be willing to take a genetic test if it were available and recommended by a doctor. The three largest barriers to testing were: 1. High cost of the test (70.6%) 2. Lack of information and procedural knowledge (58.8%) 3. Fear and anxiety about receiving a positive cancer risk result (58.0%) Other reported challenges included limited access to specialized genetic clinics (28.6%) and cultural or social concerns (22.0%).

Conclusion: Despite an encouraging readiness to test (>60%), high out-of-pocket costs and acute counseling shortages create severe barriers. Establishing subsidized testing programs and hospital-based counseling clinics is critical to making genetic risk stratification accessible.

Professor Dr Sharmin Akhtar Rupa, Dr. Sumaiya Akter Shimu

1Department of Radiology and Imaging, Popular Medical College Hospital

Mammographic microcalcification may serve as an adjunctive imaging clue to her2-positive breast cancer, warranting radiologic–pathologic correlation and confirmation of her2 status.

Introduction: HER2 status is an important biomarker for breast cancer classification, prognosis, and selection of HER2-directed therapy. An imaging feature associated with HER2-positive disease may provide a useful adjunct for radiologic–pathologic correlation, particularly in resource-limited settings. To evaluate the association between mammographic microcalcifications and HER2 positivity in breast cancer and assess their potential as an adjunctive imaging clue.

Methods: This retrospective observational study included 84 histologically proven breast malignancies with available mammographic and immunohistochemical receptor data. Mammographic calcification status and distribution were recorded. Calcification status and distribution were recorded. Definitive HER2-positive and HER2-negative cases were compared using Fisher's exact test, and odds ratios (OR) with 95% confidence intervals (CI) were calculated.

Results: Mammographic calcifications were identified in 39/119 (32.8%) cases. HER2 positivity was observed in 24/39 (61.5%) lesions with calcifications versus 11/79 (13.9%) without calcifications. Calcifications were significantly associated with HER2 positivity (OR 9.89, 95% CI 4.00–24.49; $p < 0.001$). Overall, 24/35 (68.6%) HER2-positive cancers demonstrated calcifications. Clustered calcifications were the most frequent pattern (71.8%), followed by branching (15.4%) and segmental (12.8%) patterns.

Conclusion: Mammographic microcalcifications were significantly associated with HER2 positivity and may serve as an adjunctive imaging clue, supporting radiologic–pathologic correlation and confirmation of HER2 status. Larger studies are needed to validate this association and assess the predictive value of specific calcification patterns.

Dr Purnopama Puja, Dr Nishat Tasnim

Rajshahi Medical College, 250bedded Mohammad Ali Hospital, Bogura

Metachronous Bilateral Breast Carcinoma: A Diagnostic Challenge in Distinguishing Second Primary from Metastatic Disease

Introduction: Metachronous bilateral breast carcinoma is an uncommon clinical entity characterized by the development of a second primary malignancy in the contralateral breast after a disease-free interval. The appearance of a new contralateral breast lesion in a previously treated patient poses an important diagnostic challenge in distinguishing a second primary malignancy from metastatic recurrence. We report the case of a 60-year-old woman with hormone receptor-positive, HER2-negative invasive ductal carcinoma of the left breast who underwent neoadjuvant chemotherapy followed by modified radical mastectomy and subsequently received adjuvant endocrine therapy with letrozole. Approximately three years later, she presented with left chest-wall swelling, ipsilateral upper-limb lymphoedema, and multiple right breast lumps, raising suspicion of recurrent or metastatic disease. However, histopathological and immunohistochemical evaluation of the contralateral breast lesion supported a metachronous second primary breast carcinoma rather than metastatic involvement. This case highlights the occurrence of a second primary breast malignancy despite prior systemic treatment and ongoing endocrine therapy, emphasizing the importance of accurate pathological differentiation because of its distinct prognostic and therapeutic implications. Keywords: Metachronous bilateral breast carcinoma, contralateral breast cancer, second primary malignancy, invasive ductal carcinom

Methods: ..

Results: ..

Conclusion: ..

Sanjidur Rahman, S M Rahid Sarwar, Md Ashraful Alam

Department of Medical Oncology, Combined Military Hospital (CMH), Dhaka, Bangladesh

Metachronous Breast, Ovary and Pancreatic Cancer: A Decade-Long Survivorship Journey

Introduction: Breast cancer survivors carry an increased lifetime risk of second primary malignancies. Breast, ovarian and pancreatic cancers form the core of the hereditary breast and ovarian cancer (HBOC) spectrum, most often linked to germline BRCA2 and PALB2 variants. International guidelines recommend germline testing for every patient with epithelial ovarian or pancreatic cancer, yet testing remains underused in Bangladesh. We report a woman who developed three metachronous primary cancers at these sites over ten years, treated successfully with surgery and adjuvant chemotherapy.

Methods: We retrospectively reviewed the patient's clinical notes, imaging, histopathology, immunohistochemistry and treatment records from 2015 to 2026 at CMH Dhaka. Tumours were staged by AJCC 8th edition and FIGO 2014 criteria. Multiple primary malignancy was defined by the Warren and Gates criteria. Written informed consent for publication was obtained from the patient.

Results: In July 2015, a 53-year-old woman with no comorbidities was diagnosed with carcinoma of the right breast and underwent right simple mastectomy with axillary clearance. Histopathology showed invasive ductal carcinoma, grade III (pT1 N0 (0/8) M0, stage IA). Immunohistochemistry revealed hormone receptor-negative, HER2-positive disease. She received adjuvant chemotherapy with AC ×4 followed by paclitaxel ×4, then completed 1 year of trastuzumab in January 2017. Follow-up imaging in September 2018 revealed a left ovarian mass, and she underwent total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy and excision of a sigmoid mesocolon deposit. Frozen section was malignant, and final histology showed high-grade serous carcinoma (pT2b Nx, FIGO IIB). She completed six cycles of paclitaxel-carboplatin in February 2019. Surveillance from 2019 to 2024 showed normal CA 15-3, CA-125 and CA 19-9, with imaging showing only a stable hepatic cyst and benign breast changes. In February 2025, MRCP performed for obstructive jaundice revealed a 9 × 7 mm periampullary growth. Duodenoscopic biopsy showed chronic duodenitis. Following a multidisciplinary tumour board decision, Whipple's pancreaticoduodenectomy was performed in March 2025 and revealed adenocarcinoma of the head of the pancreas, grade II, 3.5 cm, with

perineural invasion and clear resection margins (pT2 N0 (0/11), stage IB). Adjuvant gemcitabine plus capecitabine was started in April 2025, and six cycles were completed in August 2025. Follow-up imaging in May 2026 showed no recurrence, and tumour markers in June 2026 were within normal limits.

Conclusion: The sequential development of breast, ovarian and pancreatic cancers in one patient raises strong suspicion of a hereditary predisposition such as a BRCA2- or PALB2-associated syndrome. A germline result would guide eligibility for PARP inhibitors, intensity of surveillance and cascade testing of first-degree relatives. Breast cancer survivors who develop a second primary at a hereditary-spectrum site should be offered germline evaluation regardless of tumour phenotype or family history, and they need long-term multidisciplinary surveillance.

Mohammad Saiful Islam Pathan 1, Mojibur Rahman Khan 1, MD. Rakibul Islam Masud 1, Beauty Saha1, Ahmed Jabeer 1, Monalisa Khan 1, Nusrath Humayra2, Nazirum Mubin3,4

Mymensingh Medical College and Hospital

Molecular Receptor Patterns in Breast Cancer with Clinicopathological Correlates

Introduction: Breast cancer is a heterogeneous disease in which estrogen receptor (ER), progesterone receptor (PR) and human epidermal growth factor receptor 2 (HER2) status, and Triple-negative breast cancer (TNBC) are important determinants of prognosis and treatment selection. Regional data on receptor patterns in Bangladesh remain limited. Objective: This study aimed to evaluate ER, PR and HER2 receptor status and their association with clinicopathological characteristics among breast cancer patients.

Methods: This hospital-based cross-sectional analytical study conducted at Mymensingh division, Bangladesh from January-December 2025; purposively included 280 patients with histopathologically confirmed primary breast carcinoma. Clinicopathological data, including age, histopathological grade, clinical stage, history of taking oral contraceptive pills and receptor status, were collected from medical records, histopathology reports and immunohistochemistry reports.

Results: Among 280 patients, most were aged 41–60 years (149, 53.2%), followed by those aged ≤40 years (113, 40.4%). Grade II tumors predominated (245, 87.5%), and most patients presented with Stage II (116, 41.4%) or Stage III (87, 31.1%) disease. ER, PR and HER2 positivity were observed in 128 (45.7%), 103 (36.8%) and 96 (34.3%) patients, respectively, while TNBC was identified in 103 (36.8%) cases. Age group, histopathological grade clinical stage, and history of taking oral contraceptive pills showed no significant association with ER, PR, HER2 or TNBC status ($p>0.05$).

Conclusion: Breast cancer patients in this region commonly presented at a relatively younger age, with advanced-stage and higher-grade disease. Low hormone receptor (ER and PR) positivity, relatively high HER2 positivity and a substantial burden of triple-negative breast cancer suggest an aggressive biological profile, although receptor status showed no significant association with the clinicopathological correlates studied. These findings emphasize the need for early detection, routine molecular profiling and improved access to targeted therapy

Prof. Dr. AKM Minhaj Bhuiyan, Professor & Head, Dept. of Surgical Oncology, NICRH

National Institute of Cancer Research &Hospital;, Dhaka.

Oncoplastic Breast Surgery: Median 60-Month Follow-Up Results

Introduction: Over the last decades, oncoplastic breast surgery (OPBS) for breast cancer is considered a safe and effective procedure and gaining overall acceptability, satisfaction & QoL. OPBS became standard of care for selected breast cancer. Objective of this study was to assess the outcome of OPBS in terms of cosmesis, quality of life, recurrence, 60-month disease free survival (DFS) and overall survival (OS).

Methods: After performing 58 OPBS for breast cancer in the period of September 2021 to February 2022 in National Institute of Cancer Research & Hospital (NICRH) patients were followed up as per schedule up to September 2026 having median follow up time 60 months to see the outcomes set in objectives.

Results: In cosmesis 68% of patients have excellent and 32% have good results. In QoL 76% were highly satisfied and 34 % had satisfied in body image, 20% had more fear for recurrence, 84% patients were highly satisfied with treatment, and 80% patients were highly satisfied and 20% satisfied with cosmetic results. Only 2(3.4%), 1(1.7%), and 2(3.4%) patients developed local, regional (axillary) and local plus distal recurrence respectively and 5-year DSF & OS is 91.4% & 96.6% respectively.

Conclusion: OPBS for surgical management of breast cancer in Bangladesh perspective showed satisfactory results in 60 months follow up that is comparable to other international studies of its kind. Further follow-up is warranted to validate the current results.

Dr. Mohammad Shahriar Faisal, Prof. Qamruzzaman Chowdhury, Dr. Ferdous Ara Begum, Dr. Ayasha Shiddika, Dr. Md. Arifur Rahman,

Bangladesh Specialized Hospital PLC

Port-A-Cath: A Real-Life Study in Patients Receiving Chemotherapy

Introduction: Background: Chemotherapy delivered via Peripheral Venous Access (PVA) is associated with significant complications, including pain, swelling, and phlebitis. The Port-A-Cath (PAC) offers improved venous access and patient mobility during treatment. Objective: This study aimed to assess the efficacy, safety, and quality-of-life impact of PAC in chemotherapy patients, comparing it with the traditional PVA method.

Methods: This was a single-centre, prospective cohort study conducted at Bangladesh Specialized Hospital between 2019 and 2023. Fifty-four patients who had initially received chemotherapy through PVA and subsequently transitioned to PAC were enrolled. For each patient, outcomes recorded during the PVA period served as the within-patient comparator for outcomes recorded after PAC insertion.

Results: A single-centre, prospective cohort study was conducted at Bangladesh Specialized Hospital between 2019 and 2023, including 54 patients previously treated with PVA who subsequently transitioned to PAC. Pain and anxiety were assessed using the Visual Analogue Scale (VAS) and the Modified Facial Anxiety Scale (M-FAS), respectively. Patient satisfaction was assessed using a structured 5-point Likert-scale questionnaire administered at the end of the chemotherapy regimen. Paired t-tests were used to compare outcomes between PVA and PAC, with $p < 0.05$ considered statistically significant. Results: The mean age of participants was 49.7 years (SD 13.9) (M:F ratio = 1:1.7). During PVA use, patients underwent an average of 4.23 chemotherapy cycles (SD = 5.31) with a mean pain score of 4.0 (SD = 1.25); 64% reported moderate anxiety (M-FAS ≥4), and complications (chiefly phlebitis and extravasation) occurred in 64% of cases. After transition to PAC, the average number of cycles increased to 12 (SD = 7.85), the mean pain score fell to 1.4 (SD = 0.9), 80% of patients reported mild or no anxiety, and only 9.3% (5/54) experienced complications, mainly catheter-related infection. Statistically significant improvements were observed

for pain (p = 0.002), anxiety (p = 0.004), and mobility restriction (p = 0.001). Unrestricted mobility was reported by 100% of patients with PAC compared with 50% during PVA use, and 92.6% of patients reported satisfaction with PAC.

Conclusion: Compared with PVA, PAC was associated with superior safety, efficacy, and patient comfort, with significant reductions in pain, anxiety, and mobility restriction during chemotherapy.

Md Akhtaruzzaman1, Md Ahad Mia1, Mohammad Ullah Shemanto1, Martin Andrew Ebert2,3

1Evercare Hospital Chattogram, Chattogram, Bangladesh 2The University of Western Australia, Perth, Australia 3Sir Charles Gairdner Hospital, Perth, Australia

Quality Assurance of Field-in-Field and Hybrid Breast Radiotherapy: Moving Towards Machine Learning-Based Prediction

Introduction: Field-in-field (FiF) and hybrid radiotherapy techniques are commonly used for breast cancer treatment to improve dose homogeneity and organ-at-risk sparing. Hybrid breast radiotherapy using conventional tangential fields (70–75%) and volumetric modulated arc therapy (VMAT; 25–30%) faces challenges regarding increased delivery complexity and quality assurance (QA). The VMAT component is routinely verified by a measurement-based patient-specific QA (PSQA) while FiF plans are typically delivered without a dedicated measurement-based verification. The aim of this study is to develop a technique-specific QA framework and to explore the use of machine learning (ML) for predicting uncertainties related to delivery in FiF and hybrid breast radiotherapy.

Methods: A combination of a retrospective study and an experimental dosimetric verification is suggested. FiF and hybrid breast radiotherapy plans will be analysed using DICOM RTPLAN, RTDOSE and RTSTRUCT datasets. Parameters of the treatment plan, such as monitor units, multileaf collimator aperture characteristics, segment complexity, beam geometry and dose distribution parameters, will be extracted. Independent dose verification and phantom measurements will be used to define reference QA results for select FiF plans. For VMAT components, measurement-based PSQA results will be collected. Supervised ML algorithms will be evaluated for their ability to predict dose agreement and gamma passing rates, such as Random Forest, Support Vector Regression and gradient boosting. Validated component-specific predictions will then be combined into a composite hybrid QA framework to classify the plans as low-, intermediate-, and high-risk. Model performance will be evaluated using independent validation, regression and classification metrics, and calibration analysis.

Results: The proposed framework is expected to identify planning and delivery complexity parameters associated with QA variability in FiF and VMAT components. ML models will be tested on their ability to predict measured QA

outcomes and flag plans needing further verification. Integrated analysis may allow better characterisation of delivery-related risks in hybrid breast radiotherapy compared to VMAT-component assessment only.

Conclusion: Experimental dosimetric verification combined with ML-based prediction could provide a practical basis for thorough, risk-informed QA for FiF and hybrid breast radiotherapy. This approach may aid in identifying potentially challenging treatment strategies earlier, utilise QA resources more effectively and improve the safety of the treatment delivery process, without replacing current verification procedures.

Md Rashidul Islam[1]*, Samiul Hasan Shovon[1], Md Mokhlesur Rahman[2]

Gono Bishwabidyalay (University)

Radiobiological evaluation of hypofractionated vs conventional VMAT for synchronous bilateral breast cancer: a focus on regional nodal irradiation

Introduction: To compare the radiobiological characteristics of hypofractionated radiotherapy (HFRT) and conventional fractionated radiotherapy (CFRT) delivered with volumetric modulated arc therapy (VMAT) for synchronous bilateral breast cancer (SBBC) requiring regional nodal irradiation (RNI).

Methods: Eighteen patients with SBBC receiving bilateral breast/chest wall irradiation and comprehensive nodal coverage were retrospectively included. For each patient, VMAT plans were generated for CFRT (50 Gy in 25 fractions) and HFRT (40.05 Gy in 15 fractions). Dosimetric parameters of the planning target volume (PTV) were evaluated. Radiobiological assessment included equivalent uniform dose (EUD), tumor control probability (TCP), and normal tissue complication probability (NTCP). TCP was calculated using LQ-Poisson and Niemierko models, while NTCP for the lungs, heart, spinal cord, and esophagus was estimated using Lyman Kutcher Burman and Niemierko models.

Results: Both regimens achieved excellent target coverage, with mean PTV V99% values exceeding 99%. HFRT significantly reduced high-dose regions within the PTV, as reflected by lower V107% values (median: 1.35% vs. 2.60%; IQR: 5.75% vs. 7.85%; $P < 0.001$). PTV EUD was significantly lower with HFRT than with CFRT (median: 45.69 vs. 51.34 Gy; $P < 0.001$). Although TCP values were lower with HFRT in both models, tumor control remained high for both schedules. HFRT also significantly reduced EUD and NTCP values for the lungs, heart, and esophagus, whereas no significant differences were observed for the spinal cord.

Conclusion: For SBBC patients requiring RNI, HFRT-VMAT achieved target coverage comparable to CFRT while reducing excessive high-dose regions and predicted toxicity to major thoracic organs. Despite slightly lower TCP values, overall tumor control remained favorable, supporting HFRT-VMAT as a feasible treatment option for this patient population.

Syed Rashel Kabir 1*, Md Gausul Azam 1, Taufique Abdullah 1, Md. Abdul Alim Al-Bari 2, Mohammad Taufiq Alam 3

1Department of Biochemistry and Molecular Biology, 2Department of Pharmacy, 3Department of Applied Chemistry and Chemical Engineering, University of Rajshahi, Rajshahi-6205

Repurposing Diphenhydramine against breast cancer: mechanistic insights into apoptosis, p53-independent cytotoxicity, and synergy with doxorubicin in MCF-7 cells

Introduction: Drug repurposing offers a potentially efficient strategy for identifying new anticancer applications for existing medicines with established pharmacological profiles. Diphenhydramine (DIP), a first-generation histamine H1-receptor antagonist, has pharmacological activities beyond its conventional antihistaminic effects, warranting investigation of its potential anticancer properties. However, its effects on breast cancer cells, the mechanisms associated with its cytotoxicity, and its interaction with conventional chemotherapy remain insufficiently characterized. This study investigated DIP-induced cytotoxicity in human breast adenocarcinoma MCF-7 cells, focusing on p53 dependence, apoptosis-associated mechanisms, reactive oxygen species (ROS), caspase signaling, NF-κB modulation, and its interaction with doxorubicin (Dox).

Methods: Cytotoxicity was evaluated in wild-type (WT) and TP53-knockout (KO) MCF-7 cells using the MTT assay following treatment with two-fold serial concentrations of DIP. Half-maximal inhibitory concentrations (IC■■) were estimated using four-parameter nonlinear regression. Apoptosis-associated nuclear changes were examined by Hoechst 33342 staining, and cellular morphology was assessed for characteristic alterations. Intracellular ROS generation was quantified to investigate oxidative stress. The involvement of apoptotic signaling pathways was evaluated using selective caspase-3, caspase-8, and caspase-9 inhibitors, while NF-κB-associated effects were investigated using pyrrolidine dithiocarbamate (PDTC). DIP–Dox interactions were assessed using the Chou–Talalay combination index (CI) method.

Results: DIP demonstrated dose-dependent cytotoxicity in both WT and TP53-KO MCF-7 cells, with comparable sensitivity supporting a largely p53-independent response under the tested conditions. Nuclear staining and morphological examination revealed changes consistent with apoptosis, accompanied by increased intracellular ROS generation. Pharmacological inhibition of caspases attenuated DIP-induced cytotoxicity, supporting the involvement of caspase-dependent cell-death signaling and both intrinsic and

extrinsic apoptotic pathways. Modulation of NF-κB activity altered the cytotoxic response to DIP, suggesting a potential role for this pathway in cellular survival following treatment. Furthermore, combination experiments demonstrated synergistic cytotoxic interactions between DIP and Dox across the tested combinations, supporting further investigation of DIP as a potential adjunct to conventional chemotherapy.

Conclusion: Diphenhydramine exhibits p53-independent, ROS-associated, caspase-dependent cytotoxicity in MCF-7 breast cancer cells, with findings consistent with apoptotic cell death. Its synergistic interaction with doxorubicin and the observed modulation of cytotoxicity following NF-κB inhibition provide a rationale for further mechanistic and preclinical investigation. These findings support the exploration of DIP as a potential repurposed candidate for combination-based breast cancer research.

Dr Fahtiha Nasreen, Dr MD Shahriar Hossain

Evercare Hospital Dhaka, Apollo JMI Hospitals Ltd

Surgical Management of Lower Inner Quadrant Breast Cancer: A Narrative Review of Oncoplastic and Reconstructive Options

Introduction: Lower inner quadrant breast cancers pose a particular reconstructive challenge because wide local excision can cause medial contour loss, nipple displacement and inframammary fold distortion. Oncoplastic surgery offers opportunities to preserve breast shape while maintaining the principles of oncological resection.To review oncoplastic and reconstructive options for lower inner quadrant breast cancer and identify factors guiding individualised surgical selection.

Methods: A focused narrative review of selected PubMed-indexed clinical studies was undertaken. Volume displacement, volume replacement and post-mastectomy reconstruction were examined, with attention to tumour-to-breast volume ratio, breast morphology, margin management, complications, aesthetic outcomes and adjuvant treatment.

Results: For limited defects, glandular advancement and local tissue rearrangement may be sufficient. Larger defects can be addressed using LIQ-V mammoplasty, tailored reduction mammoplasty or dermoglandular rotation flaps in appropriately selected breasts. Anterior and medial intercostal artery perforator flaps provide muscle-sparing volume replacement, particularly when residual breast tissue is insufficient for reshaping. When breast conservation is unsuitable, implant-based or autologous reconstruction following mastectomy should be considered according to patient preference, comorbidity and anticipated radiotherapy. Clear margins, accurate tumour-bed marking and multidisciplinary planning remain essential. Published series report encouraging cosmetic outcomes and acceptable morbidity; however, evidence specific to this quadrant is largely derived from small observational studies, limiting conclusions regarding comparative effectiveness and long-term oncological outcomes.

Conclusion: Lower inner quadrant location alone should not preclude breast conservation. A tailored approach integrating resection requirements, breast anatomy, patient priorities and local expertise can broaden surgical options. Prospective studies with standardised oncological, aesthetic and patient-reported outcomes are needed to refine technique selection.

1. Dr Naheed Rukhsana, 2. Dr. Suriana Sultana

Delta Hospital LTD.

The Unmonitored Heart: A Real-World Audit of Cardiac Surveillance Gaps in Left-Sided Breast Cancer Patients Receiving Anthracycline-or Trastuzumab-Based Therapy with Radiotherapy

Introduction: Left-sided breast radiotherapy combined with anthracycline-or trastuzumab-based chemotherapy carries a well-established risk of cancer therapy-related cardiac dysfunction, and radiation-related cardiac risk rises with the dose delivered to the heart. International cardio-oncology guidelines therefore recommend baseline cardiac assessment, including left ventricular ejection fraction (LVEF), before these treatments. In real-world, resource-limited practice, how often this is done is rarely audited. We examined this gap directly.

Methods: We retrospectively reviewed 94 patient records from a single radiation and medical oncology department. Breast cancer accounted for 90 of 94 patients (95.7%). For each patient, we extracted stage, chemotherapy regimen, radiotherapy dose-fractionation, and any documented LVEF.

Results: Among the 90 breast cancer patients, the mean age was 46.3 years (range 28–71). Laterality was striking: 88 of 90 patients (97.8%) had documented left-sided disease, and none had right-sided disease. Cardiotoxic-regimen exposure was common—59 patients (65.6%) received anthracycline-based chemotherapy and 10 (11.1%) received trastuzumab-based regimens—and 86 patients (95.6%) received radical radiotherapy (2.0–2.7 Gy per fraction; 40–50 Gy in 15–25 fractions). Despite this convergence of cardiac risk factors, LVEF was documented in only 22 of 90 patients (24.4%) and in only 19 of the 61 patients (31.1%) treated with an anthracycline or trastuzumab. Only one patient had serial measurements: her LVEF fell from 48% to 28% between 2025 and 2026—a 20-point absolute decline indicating overt cardiac dysfunction—while the other 21 patients had a single recorded value of 59–80% (median 63%).

Conclusion: Left-sided, cardiotoxic-regimen exposure was common in this cohort, yet LVEF was documented in fewer than one in four patients, and serial

assessment in only one. Within this small monitored subset, overt cardiotoxicity was already captured in one patient—suggesting that the true burden among the unmonitored majority may be underestimated. These findings support baseline and serial LVEF assessment as a standard component of chemoradiotherapy pathways for left-sided breast cancer, particularly in settings where formal cardio-oncology surveillance is not yet routine.

Syed Rashel Kabir1#*, Md Gausul Azam1#, Taufique Abdullah1, Mohammad Taufiq Alam2

1Department of Biochemistry and Molecular Biology and 2Department of Applied Chemistry and Chemical Engineering, University of Rajshahi, Rajshahi-6205, Bangladesh

TP53-Associated Mechanisms of Loperamide-Enhanced Doxorubicin Cytotoxicity in MCF-7 Breast Cancer Cells

Introduction: Breast cancer remains a leading cause of cancer-related mortality among women, while treatment resistance and chemotherapy-associated toxicity remain major challenges. Drug repurposing offers an opportunity to identify anticancer applications of established drugs with known pharmacological profiles. Loperamide, an FDA-approved antidiarrheal drug, has demonstrated anticancer activity and doxorubicin-sensitizing effects in other breast cancer models. However, whether loperamide produces synergistic cytotoxicity with doxorubicin in parental, hormone receptor-positive and TP53-wild-type MCF-7 cells, independently of an MDR1-overexpressing phenotype, remains insufficiently defined. In particular, the functional contribution of TP53 and NF-κB-associated signaling to this interaction has not been established. Addressing these questions may help clarify whether loperamide-mediated chemosensitization extends beyond drug-efflux modulation and involves broader cellular mechanisms relevant to hormone receptor-positive breast cancer.

Methods: MCF-7 cells were treated with loperamide and doxorubicin individually or in combination. Cytotoxicity was assessed by MTT assay and the IC■■ was obtained by linear interpolation between the two concentrations that bracket 50% inhibition. The drug interactions were quantified using the Chou–Talalay combination index (CI) and dose-reduction index. Apoptotic morphology, caspase activity, reactive oxygen species (ROS), and mitochondrial membrane potential were evaluated using Hoechst 33342, fluorescent caspase substrate, DCFH-DA, and JC-1 assays. Expression of TP53, CDKN1A, TNF-α, BAX, BCL2, PARP-1, MAPK, and NFKBIE was analyzed by real-time PCR. NF-κB-associated signaling was further examined using PDTC, and molecular docking was performed against NF-κB-and MAPK-associated targets. The functional role of TP53 was investigated by comparing wild-type and CRISPR-Cas9-mediated TP53-knockout MCF-7 cells.

Results: Loperamide and doxorubicin produced IC■■ values of 8.55 and 0.64 μg/mL, respectively. Across 16 concentration combinations, synergistic interactions were observed in 11, with the strongest synergy at 8 μg/mL

loperamide plus 1 μg/mL doxorubicin (CI=0.288). The doxorubicin dose reduction index reached 10.46. Combination treatment enhanced apoptotic morphology, ROS generation, caspase activation, and mitochondrial membrane depolarization. Caspase inhibition demonstrated a prominent contribution of caspase-7, with additional involvement of caspase-8 and caspase-9. Treatment increased TP53, CDKN1A, and TNF-α expression and altered BAX, BCL2, PARP-1, MAPK, and NFKBIE expression. PDTC further increased cytotoxicity of loperamide alone and the loperamide-doxorubicin combination, supporting involvement of NF-κB-associated survival signaling. Molecular docking demonstrated favorable predicted interactions of loperamide and doxorubicin with NF-κB-and MAPK-associated targets. Importantly, TP53 knockout increased the loperamide and the doxorubicin IC■■ remarkably. Synergy remained detectable in all six tested combinations in TP53-knockout cells but was generally weaker; for 8 μg/mL loperamide plus 1 μg/mL doxorubicin, CI increased from 0.288 in wild-type cells to 0.417 after TP53 knockout. Maximum combination-induced inhibition decreased from 96.61% to 84.36%. These findings indicate that functional TP53 enhances loperamide sensitivity and contributes to the magnitude of drug interaction, while residual synergy in TP53-deficient cells suggests involvement of additional pathways.

Conclusion: Loperamide potentiates doxorubicin-induced cytotoxicity in parental MCF-7 cells through coordinated apoptotic, oxidative, mitochondrial, TP53-associated, and NF-κB/MAPK-associated mechanisms. TP53 is not absolutely required for loperamide activity, but functional TP53 contributes to drug sensitivity and the magnitude of loperamide-doxorubicin synergy. These findings extend previous observations from MDR1-overexpressing and triple-negative breast cancer models by demonstrating chemosensitization in parental MCF-7 cells and identifying a functional contribution of TP53. The substantial reduction in the effective doxorubicin dose observed in combination treatment provides a rationale for further investigation of loperamide as a potential repurposed chemosensitizing agent in breast cancer.

Prof. Dr. Md. Golam Mostafa

Anowara Medical Services

Understanding Spindle Cell Lesions of the Breast: Diagnostic Pitfalls, Immunohistochemical Strategies, and Surgical-Oncological Implications.

Introduction: Background: Spindle cell neoplasms of the breast account for less than 5% of all breast lesions, yet they represent one of the most complex challenges in diagnostic breast pathology. The spectrum ranges from benign reactive proliferations to low-grade locally aggressive lesions and highly malignant carcinomas or sarcomas. Because these entities exhibit overlapping morphologic features, accurate differentiation on limited core needle biopsy (CNB) specimens is crucial to prevent inappropriate surgical or oncological management.

Methods: Objective: To provide breast surgeons, surgical oncologists, and general surgeons with a practical, evidence-based diagnostic framework for evaluating spindle cell lesions of the breast, emphasizing critical immunohistochemical (IHC) strategies, surgical margin requirements, and therapeutic pitfalls. Diagnostic Approach & Key Findings: Breast spindle cell lesions are broadly categorized into biphasic and monophasic (pure spindle cell) proliferations. A major diagnostic challenge involves distinguishing low-grade, bland spindle cell lesions—such as fibromatosis (desmoid tumor), pseudoangiomatous stromal hyperplasia (PASH), and myofibroblastoma—from fibromatosis-like metaplastic carcinoma (FL-MBC). Fibromatosis requires differentiation via nuclear β-catenin reactivity and negative cytokeratins, whereas FL-MBC displays reactivity for broad-spectrum and high-molecular-weight cytokeratins (CK5/6, CK14) and p63. Among high-grade entities, spindle cell metaplastic breast carcinoma (SCLC) is far more common than primary breast sarcomas or malignant phyllodes tumors. High-grade SCLC can undergo extensive Epithelial-Mesenchymal Transition (EMT), leading to complete loss of cytokeratin and p63 expression on CNB, posing a significant diagnostic trap. Broad IHC panels combining epithelial (AE1/AE3, CK7, p63, p40) and mesenchymal/myofibroblastic markers (CD34, SMA, desmin, beta-catenin) are mandatory for definitive subtyping.

Results: Clinical & Surgical Implications: Treatment strategies depend heavily on accurate histological subtyping. Fibromatosis and low-grade FL-MBC necessitate wide local excision with clear negative margins due to high local

recurrence rates, though nodal metastasizing potential is negligible. High-grade SCLC demonstrates aggressive biologic behavior with high rates of distant hematogenous metastasis and poor responsiveness to conventional anthracycline/taxane-based chemotherapy regimens. Routine axillary lymph node dissection is generally not indicated for pure spindle cell metaplastic carcinomas given their significantly lower incidence of nodal metastasis (30%) compared to conventional invasive ductal carcinoma.

Conclusion: Any ambiguous spindle cell lesion on core needle biopsy lacking a definitive benign diagnosis should be treated as a lesion of uncertain malignant potential warranting excision and multidisciplinary tumor board review. Pathologic-surgical-oncological collaboration is essential to ensure appropriate surgical margin planning and tailored systemic management.

SM Ahsanuzzaman

CUET

What AI Can Actually Help With in Clinical Practice - and What It Still Cannot

Introduction: Artificial Intelligence (AI) is rapidly transforming healthcare, offering new opportunities to improve clinical efficiency, documentation, decision-making, and patient outcomes. However, its practical application in routine clinical practice, particularly in resource-constrained settings like Bangladesh, requires careful consideration of clinical safety, data privacy, reliability, and local validation.

Methods: This presentation explores the current capabilities and limitations of AI in everyday medical practice, with particular emphasis on breast cancer and multidisciplinary oncology care. It examines three major applications of AI – perception, language, and prediction – highlighting emerging clinical evidence and practical uses of generative AI in patient communication, clinical documentation, literature review, and research. The presentation also introduces MediStack, a Bangladesh-developed digital healthcare ecosystem integrating AI into routine clinical workflows. Its capabilities include Cortex AI for conversation-to-clinical documentation, AI-powered clinical report analysis, synthesis of longitudinal patient information, and multidisciplinary Tumour Board support. These capabilities connect with oncology protocol management, chemotherapy day care workflows, and structured cancer registry development to support continuity of care from consultation and treatment planning through follow-up.

Results: Beyond improving clinical efficiency, structured digital records offer opportunities to generate locally relevant evidence on cancer presentation, treatment patterns, and outcomes in Bangladesh. Importantly, the presentation emphasises that AI should augment rather than replace clinical judgement. Responsible implementation requires clinician oversight, patient data protection, transparent limitations, and validation using local clinical data.

Conclusion: Ultimately, the goal is to demonstrate how thoughtfully integrated AI can reduce administrative burden, strengthen multidisciplinary collaboration, and support safer, more coordinated, evidence-driven cancer care in Bangladesh.

POSTER

SL	AUTHOR	TITLE
01.	Sanjidur Rahman; S M Rahid Sarwar; Md Ashraful Alam	Metachronous Breast, Ovary and Pancreatic Cancer: A Decade-Long Survivorship Journey
02.	Mohammad Shahriar Faisal; Qamruzzaman Chowdhury; Ferdous Ara Begum; Ayasha Shiddika; Md. Arifur Rahman Chemotherapy	Port-A-Cath: A Real-Life Study in Patients Receiving Chemotherapy
03.	Md Rashidul Islam; Samiul Hasan Shovon; Md Mokhlesur Rahman	Radiobiological Evaluation of Hypofractionated vs Conventional VMAT for Synchronous Bilateral Breast Cancer with Regional Nodal Irradiation
04.	Rofikun Nahar Rosmi	Dosimetric Evaluation of TrueBeam HyperSight Imaging for Adaptive Radiotherapy Planning in Breast Cancer
05.	Md Mokhlesur Rahman	Evaluation of Short-Arc CBCT-Based Image Registration Accuracy in Breast Cancer Radiotherapy
06.	Umme Humyra Kaneta; AKM Minhaz Bhuiyan; Hasan Shahriar Md. Nuruzzaman; Mushtaque Ahmed Jalali	How Much Breast Can We Safely Take? Percentage Breast Volume Excision as an Objective Guide to Cosmesis in Oncoplastic Surgery
07.	Mostakim Maria Alievna Shahriar Md. Nuruzzaman; Mushtaque Ahmed Jalali	From Defect Coverage to Microsurgical Breast Reconstruction: Flap-Based Solutions after Mastectomy in Bangladesh Cosmesis in Oncoplastic Surgery
08.	Fahtiha Nasreen; MD Shahriar Hossain	Surgical Management of Lower Inner Quadrant Breast Cancer: Narrative Review of Oncoplastic and Reconstructive Options
09.	Mohammad Saiful Islam Pathan et al.	Molecular Receptor Patterns in Breast Cancer with Clinicopathological Correlates
10.	Quazi Tasfia	Desmoid-Type Fibromatosis of the Male Breast Mimicking Carcinoma: A Case Report
11.	Purnopama Puja; Nishat Tasnim	Metachronous Bilateral Breast Carcinoma: Distinguishing Second Primary from Metastatic Disease
12.	Syed Rashel Kabir et al.	TP53-Associated Mechanisms of Loperamide-Enhanced Doxorubicin Cytotoxicity in MCF-7 Cells
13.	Md. Mashukur Rahman et al.	Do Social Media Users Feel Better Informed About Breast Cancer Treatment? Single-Centre Cross-Sectional Study
14.	Farzana Binta Rahman; Sumon M M; Halima U; Akhter F; Sultana L; Das A; Reza S; Hussain SMA	Fear of Cancer Recurrence among Women with Breast Cancer Attending a Tertiary Hospital of Bangladesh

ORAL ABSTRACTS

SL	AUTHOR	TITLE
01.	Md. Arifur Rahman et al.	Impact of a Structured Multidisciplinary Tumour Board on Staging, Treatment Planning and Breast Conservation: Interim Analysis
02.	Ayasha Shiddika; Qamruzzaman Chowdhury; Salma Sultana; Ferdous Ara Begum; Sharmin Akter Rupa; S M Khodeza Nahar Begum; Mashud Parvez; Md. Nurunnabi; Md. Arifur Rahman	Clinico-pathological Characteristics in Young Breast Cancer Patients: Single-Centre Retrospective Study in a Low-Middle Income Country
03.	Naheed Rukhsana; Suriana Sultana	The Unmonitored Heart: Real-World Audit of Cardiac Surveillance Gaps in Left-Sided Breast Cancer Receiving Anthracycline/Trastuzumab with Radiotherapy
04	Col Dr. S M Rokonuzzaman	Cardiac & Lung Dose Evaluation with Deep-Inspiratory Breath Hold vs Free Breathing Radiotherapy for Left-Sided Breast Cancer
05.	M. Monir Uddin	AI for Breast Cancer Radiotherapy: Automated Contouring, Dose-Volume Prediction and Clinical Workflow Evaluation in Bangladesh
06.	A. K. Mostaque; A. M. M. Shariful Alam	Ipsilateral Proactive Oncoplastic Enlargement of the Breast and Prognostic Stratification of Lymph Node Ratio after Axillary Dissection
07.	Shamsun Nahar; Sk Farid Ahmed; Warda Kamal Mollik; Khadiza Ahmed	Effect of Postoperative Metformin on Seroma Formation Following Breast Surgery: A Prospective Comparative Study
08.	Zaman Ummay Humayra	Expanding Surgical Choices in Breast Cancer: A Five-Year Experience from a Private Cancer Centre
09.	AKM Minhaj Bhuiyan	Oncoplastic Breast Surgery: Median 60-Month Follow-Up Results
10.	Ali Nafisa; Md. Mokhlesur Rahman	From Diagnosis to Recovery: The Breast Unit Pathway and Advances in Oncoplastic Breast Surgery in Bangladesh
11.	Md. Golam Mostafa	Understanding Spindle Cell Lesions of the Breast: Diagnostic Pitfalls, IHC Strategies and Surgical-Oncological Implications
12.	Md Zillur Rahman	FISH HER2 Amplification Status among IHC 2+ (Equivocal) Breast Carcinoma Patients of Bangladesh: A Series of 75 Cases

SL	AUTHOR	TITLE
13.	Sabrina Rashid	Axillary Mets Detection by Ultrasound
14.	Syed Rashel Kabir et al.	Repurposing Diphenhydramine against Breast Cancer: Apoptosis, p53-Independent Cytotoxicity and Synergy with Doxorubicin in MCF-7
15.	Mehedi Hasan Al Amin; Md. Siddiqul Islam	ABCB1 Polymorphism and Response to Neoadjuvant Chemotherapy in Breast Cancer Patients from Bangladesh
16.	Aditi Paul Chowdhury	Knowledge, Awareness and Barriers to Breast Cancer Genetic Testing among Women with Positive Family History
17.	Nishat Tasnim	Free Breathing versus Deep Inspiration Breath Hold in Post-mastectomy Radiotherapy for Left-Sided Breast Cancer: Dosimetric Comparison

BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2015























p 0,001
38%














Organized By:


Breast Cancer






Breast Ca
Society of Su









BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2017








BANGLADESH
BREAST
CANCER
CONFERENCE
2017
Breast Cancer Study Forum
Society of Surgeons of Bangladesh












CANCER
CONFERENCE






































Welcome to
PRE CONFERENCE



BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2019


BANGLADESH
BREAST
CANCER
CONFERENCE
2019




BREAST
CANCER
CONFERENCE
2019








BANGLADESH
BREAST
CANCER
CONFERENCE








BANGLADESH
BREAST
CANCER
2019
CONFERENCE




























EVALUATION OF EARLY STAGE BREA
CANCER: OUR CURRENT PRACTICE AND
RATIONALE


CA
CONFI




BANGLADESH
BREAST
CANCER
CONFERENCE
2019
BREAST CANCE






BANGLADESH
BREAST
CANCER
CONFERENCE
REAST CANC

CONTINUOUS MEDICAL EDUCATION (BREAST AND LUNG)



OncoEdu
Research | Education| Treatment

Lung Cancer Expert Series 2022

Roche

Welcome to the Lung Cancer Expert Series 2022, a series of live and interactive 1-hour webinars, will be presented by a faculty of world-leading multidisciplinary Lung cancer experts. These sessions will discuss relevant Lung cancer topics and offer a fantastic opportunity for you to interact with our esteemed faculty through live Q&A sessions.



Session 1 | Dr. Akhil Chopra

Molecular testing landscape in Lung Cancer

11 February 2022 | Time: 3:30- 5:00 pm (BST)



Session 2 | Prof. Tony Mok

Biomarker-Driven Advanced NSCLC management focusing EGFR & ALK

18 February 2022 | Time: 3:30 - 5:00 pm (BST)



Session 3 | Dr. Akhil Chopra

Future of Biomarker-Driven Advanced NSCLC (KRAS, ROS1, RET, NTRK, BRAF, MET) **Management**

25 February 2022 | Time: 3:30 - 5:00 pm (BST)



Session 4 | Prof. Silvia Novello

Cancer Immunotherapy: Resectable NSCLC and Novel Combinations in Lung Cancer

04 March 2022 | Time: 3:30 - 5:00 pm (BST)



Session 5 | Dr. Emad Dawoud

Cancer Immunotherapy: Immune checkpoints across line of metastatic NSCLC

11 March 2022 | Time: 3:30 - 5:00 pm (BST)


Lung Cancer
Expert Series 2022
4

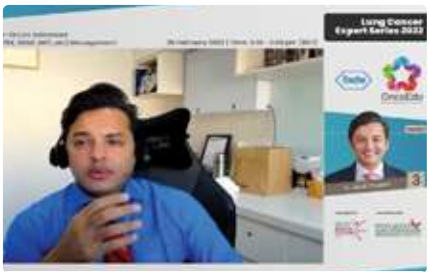

Lung Cancer
Expert Series 2022
5


Lung Cancer
Expert Series 2022
2








Lung Cancer
Expert Series 2022
3











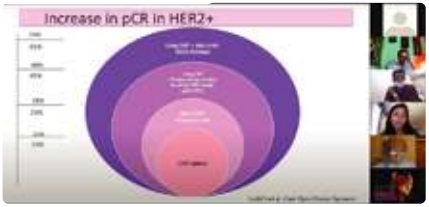











Increase in pCR in HER2+

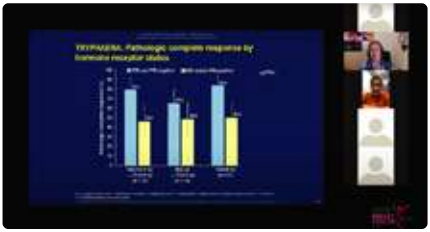

Early Breast Cancer
Metastatic Breast Cancer




Breast Cancer Unit








Adjuvant Treatment in HER2+ EBC Patient: Selecting the Standard Option
Maria Vidal, MD, PhD
Medical Oncology Department
Translational Genomics and Targeted Therapeutics in Solid Tumors
Universitat de Barcelona
mpvidal@clinic.cat
Friday, October 23rd
CLÍNIC
IDIBAPS
UNIVERSITAT DE BARCELONA
SOLTI

GLOBAL CANCER INSTITUTE (GCI)

BANGLADESH SOCIETY FOR BREAST CANCER STUDY
BSBCS

GCI
Global Cancer Institute

BANGLADESH SOCIETY FOR BREAST CANCER STUDY & GLOBAL CANCER INSTITUTE

JOINT COLLABORATION BREAST TUMOR BOARD




Case
• Patient History:
• 58, 65 years female, Ex Prof of Physics
• Comorbidity- DM, OA –knee right, Dyslipidaemia
• Family history- Younger sister had breast CA Dx at 50 yrs
• Past medical history- SVH in 1995, Cataract surgery b/e on 2
2019
• Gynaecologic-obstetric history- No issue, OCP- not taken
• In early 2020 she felt a mass with mild pain in her right breast and
went for evaluation.


























•Presented with right breast lump in UOQ. 4th quarter of 2018.
•Core biopsy: IDCC GII.
•Clinical staging: T2N1.
•Surgery: BCS with AxBary Clearance done 4th Q of 2018.
•HPR: IDCC GII, T 4x3 cm, ALN Metastatic DCC (10/22), Margins free
•IHC: ER/PR Positive(2/3), HER2 Negative.
•Pathological staging: T2N1.


NEWCASTLE









ANUAL GENERAL MEETING (AGM)






SOCIETY FOR
BREAST
CANCER












BREAST
CANCER


























PRECEPTORSHIP PROGRAM-01

PROGRAM SCHEDULE

Day - 1 : 4th March 2021 (Thursday)

Arrival and Evening Tea	05:30 PM	
Welcome Address	06:00 - 06:05 PM	Prof. Qamruzzaman Chowdhury
Inauguration	06:05 - 06:10 PM	Prof. M A Hai
Basic Imaging of Breast Cancer	06:10 - 07:00 PM	Dr. Sharmin Akhtar Rupa
ABC 5 Guideline & Management of HR+ Breast Cancer	07:00 - 08:00 PM	Prof. Fatema Karduso
Understanding the Basic Pathology of Breast Cancer	08:00 - 08:45 PM	Prof. S.M Khodeza Nahar Begum
How to Read a PET CT Report	08:45 - 09:15 PM	Dr. Rawnak Afrin
Dinner	09:30 PM	

Day - 2 : 5th March 2021 (Friday)

Breakfast	08:00 - 09:00 AM	
Hypofractionation in Breast Radiotherapy	09:00 - 09:40 AM	Prof. Tabassum Wadasadawala
Essentials of Breast Cancer Surgery	09:40 - 10:10 AM	Dr. Garvit Chitkara
Recent Advances in Breast Cancer Surgery	10:10 - 10:40 AM	Dr. Shalaka P Joshi
Tea Break	10:40 - 11:10 AM	
Plan Evaluation in Breast Radiotherapy	11:10 - 11:50 AM	Prof. Rajesh Balakrishnan
Management of TNBC	11:50 AM - 12:30 PM	Prof. Dr. Jyoti Bajpai
Cardiac Sparing Breast Radiotherapy	12:30 - 01:00 PM	Dr. Angela Gaerlan Tagle
Lunch & Prayer Break	01:00 - 02:30 PM	
Target Volume Delineation in Breast Cancer	02:30 - 03:00 PM	Dr. Kitwadee Saksornchai
Contouring & Plan Evaluation Workshop Contouring Presentation by participants Group Work	03:00 - 04:30 PM	Prof. Tabassum Wadasadawala Prof. Rajesh Balakrishnan Dr. Reena Phurailatpam
Tea Break	04:30 - 05:00 PM	
HER2+ MBC	05:00 - 06:00 PM	Dr. Evandro de Azambuja
Precision Oncology for Breast cancer	06:00 - 07:00 PM	Dr. Ben Ho Park
HER2+ Breast Cancer : Overview of Management	07:00 - 08:00 PM	Prof. Dr. Don S. Dizon
Closing & Vote of Thanks	08:00 PM	Dr. Md Salim Reza
Cultural Program	08:00 - 09:00 PM	
Dinner	09:00 - 10:00 PM	


























BREAST
CANCER
STUDY
BSBCS













PRECEPTORSHIP PROGRAM-02

Day - 1 : 25th November 2021 (Thursday)

Arrival and Evening Tea	05:30 PM	
Welcome Address	06:00 - 06:05 PM	Prof. Qamruzzaman Chowdhury
Inauguration	06:05 - 06:10 PM	Prof. M A Hai
Basic Imaging of Breast Cancer	06:10 - 07:00 PM	Dr. Sharmin Akhtar Rupa
ABC 5 Guideline & Management of HR+ Breast Cancer	07:00 - 08:00 PM	Prof. Fatema Karduso
Understanding the Basic Pathology of Breast Cancer	08:00 - 08:45 PM	Prof. S.M Khodeza Nahar Begum
How to Read a PET CT Report	08:45 - 09:15 PM	Dr. Rawnak Afrin
Dinner	09:30 PM	

Day - 2 : 26th November 2021 (Friday)

Breakfast	08:00 - 09:00 AM	
Hypofractionation in Breast Radiotherapy	09:00 - 09:40 AM	Prof. Tabassum Wadasadawala
Essentials of Breast Cancer Surgery	09:40 - 10:10 AM	Dr. Garvit Chitkara
Recent Advances in Breast Cancer Surgery	10:10 - 10:40 AM	Dr. Shalaka P Joshi
Tea Break	10:40 - 11:10 AM	
Plan Evaluation in Breast Radiotherapy	11:10 - 11:50 AM	Prof. Rajesh Balakrishnan
Management of TNBC	11:50 AM - 12:30 PM	Prof. Dr. Jyoti Bajpai
Cardiac Sparing Breast Radiotherapy	12:30 - 01:00 PM	Dr. Angela Gaerlan Tagle
Lunch & Prayer Break	01:00 - 02:30 PM	
Target Volume Delineation in Breast Cancer	02:30 - 03:00 PM	Dr. Kitwadee Saksornchai
Contouring & Plan Evaluation Workshop Contouring Presentation by participants Group Work	03:00 - 04:30 PM	Prof. Tabassum Wadasadawala Prof. Rajesh Balakrishnan Dr. Reena Phurailatpam
Tea Break	04:30 - 05:00 PM	
HER2+ MBC	05:00 - 06:00 PM	Dr. Evandro de Azambuja
Precision Oncology for Breast cancer	06:00 - 07:00 PM	Dr. Ben Ho Park
HER2+ Breast Cancer : Overview of Management	07:00 - 08:00 PM	Prof. Dr. Don S. Dizon
Closing & Vote of Thanks	08:00 PM	Dr. Md Salim Reza
Cultural Program	08:00 - 09:00 PM	
Dinner	09:00 - 10:00 PM	


2nd Breast Cancer
Preceptorship Program




2nd Breast Cancer
Preceptorship Program


























2nd Breast Cancer
Preceptorship Program







SCREENING PROGRAM






ফাউন্ডেশন
ব্রেস্ট ক্লিনিং ভ্যালেন্টাইন
শক্তি ফাউন্ডেশন।


ব্রেস্ট ক্লিনিং ভ্যালেন্টাইন
শক্তি ফাউন্ডেশন।









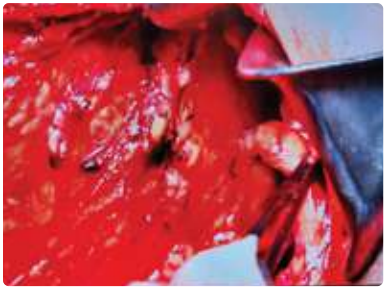
BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2022


















BANGLADESH
BREAST
CANCER
CONFERENCE
2022




global burden.
CVD


ANGLADESH
BREAST
20








BANGLADESH BREAST CANCER
CONFERENCE 2022






t wall flaps













CRC MANAGEMENT EVENT




CRC Management
CRC Management


CRC Management
CRC Management
CRC Management










CRC Management




















Welcome
Participants








TNT to Metasta


What went Wrong?





3rd PRECEPTORSHIP PROGRAM ON SARCOMA


Presents










BREAST CANCER
Presents
& Future Aspects




BREAST CANCER
Management of Sarcoma:
Present & Future Aspects




Presents






CT SCAN








BANGLADESH SOCIETY FOR BREAST CANCER STUDY
BSBCS
OncoEdu
Presents









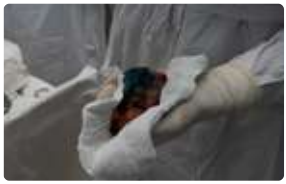
BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2025
















5TH
BBCC





BREAST
CANCER


5TH
BBCC
















Prof. S M Khodeza
Nahar Begum
Dr. Dodul Mondal


5TH BBCC












diagnosis









PRECEPTORSHIP OF LUNG CANCER PROGRAM


PRECEPTORSHIP




PRECEPTORSHIP


PRECEPTORSHIP


PRECEPTORSHIP
OF LUNG CANCER




















PRECEPTORSHIP
OF LUNG CANCER
BREAST
CANCER
OncoEdu




PRECE
OF L














PRECEP
OF LUNG




Role of Radiation in NSCLC
Dr Dodul Mondal, MD, DNB, UICCF
Principal Director and Unit Head
Radiation Oncology
Speciality Hospital, Saket, New
of New Jersey, USA
(NCI)
PRECEPTORSHIP
OF LUNG CANCER



SOUTH KOREA MEDICAL TOUR

GBCC & Samsung Medical Center






Rehobot











EVENT PARTNERS

PLATINUM

BEACON® Pharmaceuticals Limited
Light for life

Roche

RADIANT PHARMACEUTICALS

Healthcare Oncology | Healthcare

GOLD

synovia
hope. health. happiness.

incepta

SILVER

ZAS Corporation Ltd.

MGH HEALTHCARE AstraZeneca

CONTRIBUTORS



BEACON Pharmaceuticals Limited — Light for life

Roche

RADIANT PHARMACEUTICALS

Healthcare Oncology | Healthcare

Incepta

synovia — hope. health. happiness.

ZAS Corporation Ltd.

MGH HEALTHCARE

AstraZeneca

SK+F ONCOLOGY

Everest Pharmaceuticals Ltd

BEXIMCO PHARMA

ZISKA PHARMA

RENATA PLC

ACI — ADVANCING POSSIBILITIES

Tradevision LIMITED

strand

Opsonin Pharma

Reliance Labs

Jenphar Bangladesh | جنفار بنغلاديش

NOVARTIS

The IBN SINA Pharmaceutical Industry PLC

ARISTOPHARMA LTD.

Adding Strength, Advancing Hope...



The addition of Taxotere® to ADT* and Abiraterone significantly Improves Overall Survival & Radiographic Progression-Free Survival in patients with de novo mCSPC**.[1]

TAXOTERE®
(docetaxel)
Time Life Confidence



THE ORIGINATOR BRAND

More than 25 years to Experience in Bangladesh

*ADT- Androgen deprivation therapy; **mCSPC - metastatic castration-sensitive prostate cancer

Reference: Fizazi K, Foulon S, Carles J, et al.;Abiraterone acetate plus prednisone added to androgen deprivation therapy and docetaxel in de novo metastatic castration-sensitive prostate cancer (PEACE-1): a multicentre, open-label, randomised, phase 3 trial. The Lancet. 2022;399(10336):1695–1707. doi: 10.1016/S0140-6736(22)00367-1

For Abridged Prescribing Information, Scan here

synovia
hope. health. happiness.

Synovia Pharma PLC.
A subsidiary of BEXIMCO PHARMA
6/2/A, Segun Bagicha, Dhaka -1000, Bangladesh
Tel : +880 9678000777 | Fax : +880 2223380009
www.synoviapharma.com | synoviapharmaplc

Taxotere® is a registered trademark of Sanofi, France.
For more information, visit: www.synoviapharma.com

SP25.US.PM1000016



"A JOURNEY OF STRUGGLE
LEADS TO MOMENTS OF RELIVE..."

Paxane™

Paclitaxel Injection USP



Not Just an Option, but a Choice to Relive...

Each Dose Comes with

FREE*

Normal Saline in Glass Bottle
DEHP-Free Infusion Set



Preserving Hope with

- Trusted CFDA & GMP-Approved API Source
- Cost Effective Without Compromising Quality
- Reliable Nationwide Availability When it Matters Most

Scan Here for Paxane™ API

SP.26.10.PMPAX00059

synovia
hope. health. happiness.

Synovia Pharma PLC.
A subsidiary of BEXIMCO PHARMA
6/2/A, Segun Bagicha, Dhaka-1000, Bangladesh
Tel : +880 9678000777 | Fax : +880 2223380009
www.synoviapharma.com | synoviapharmaplc

Paxane™ is a registered trademark of Synovia Pharma PLC.
For more information, visit: www.synoviapharma.com



Approximately **80%** of all Breast Cancers are currently categorized as **HR+/HER2- negative** Breast Cancer[1].

Riboxen

Ribociclib Succinate INN 200 mg tablet

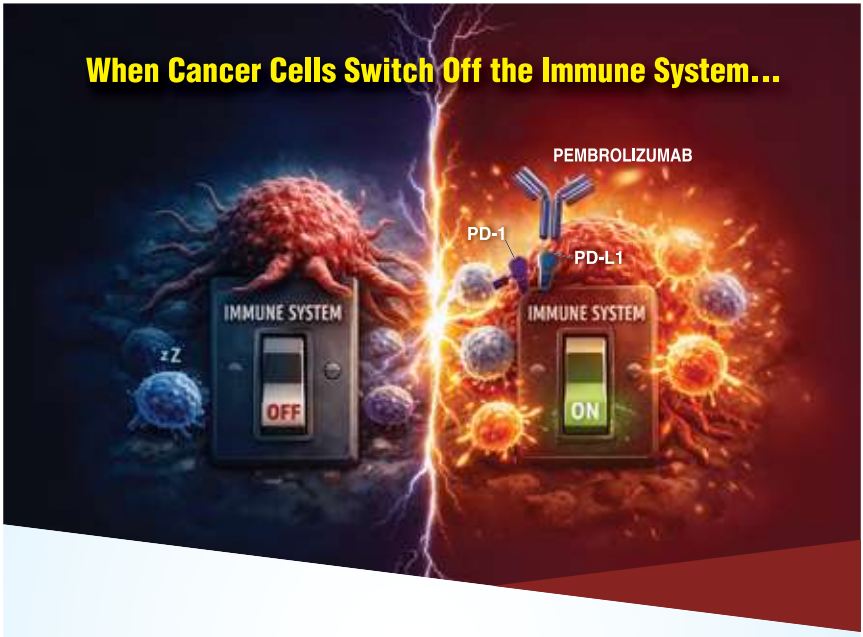
The Preferred Treatment for ET naive Early and Advanced Breast Cancer

- The First-line CDK-4/6 inhibitor to ensure mOS ≥ 5 years in both Pre- & Postmenopausal patients
- Shows Increased mOS by 25% compared to Endocrine Therapy alone
- Delays time to chemotherapy over 4 years
- Ensures better Quality of Life (QoL) than other CDK-4/6 inhibitors (less GI toxicity)

Ref. 1. ESMO Open. 2023 Aug;8(4):101615

Everest Pharmaceuticals Ltd.
Dhaka, Bangladesh
www.everestpharmabd.com

Everest



PEMREST

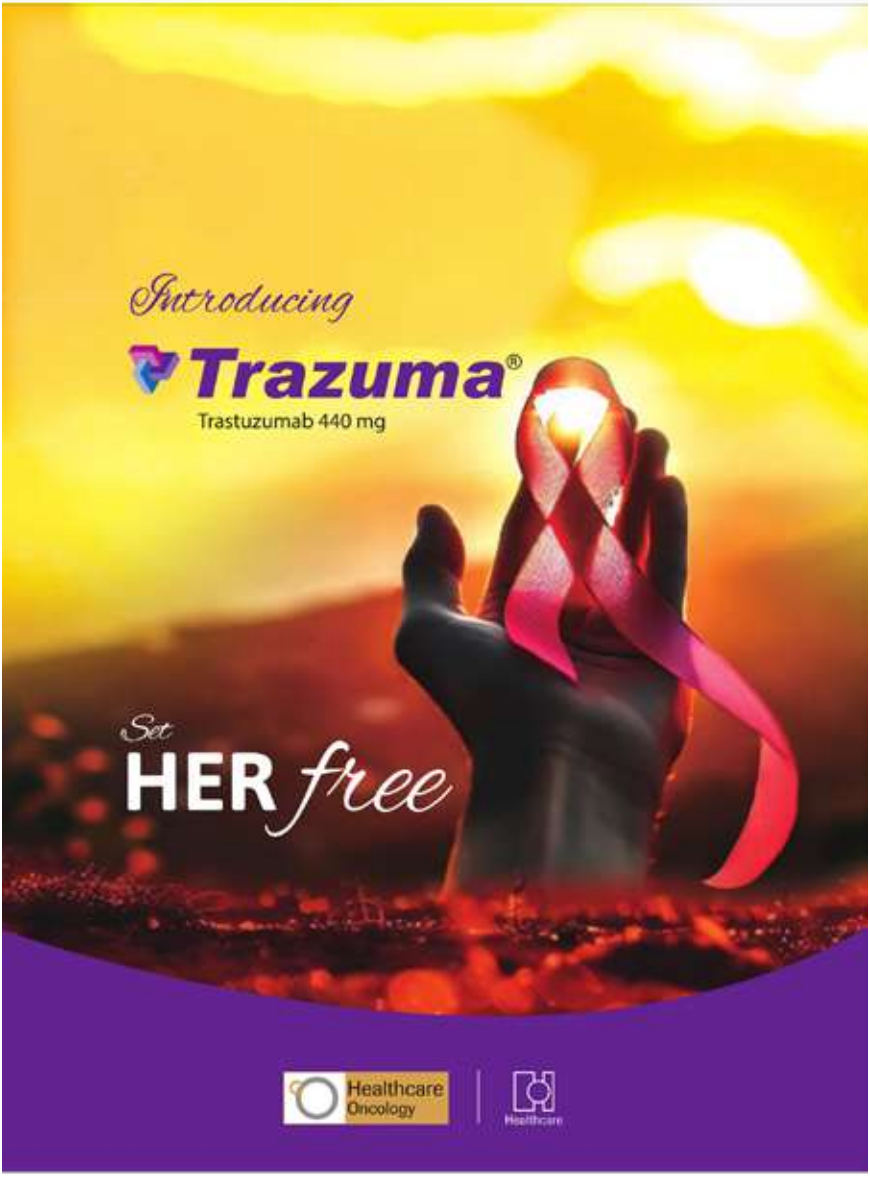
Pembrolizumab INN 100 mg Injection

The Key to Unleash Immune Power for Treating Multiple Cancers

- Manufactured in Dedicated Facility for Biological Products (GMP & FDA Compliant)
- Quality Assured Through Advanced Analytical Testing by Capillary Electrophoresis
- Temperature Controlled Delivery from Production to End User

Everest Pharmaceuticals Ltd.
Dhaka, Bangladesh
www.everestpharmabd.com

Everest
Value . Innovation . Generation


Introducing
Trazuma®
Trastuzumab 440 mg
Set
HER free
Healthcare
Oncology
Healthcare

Beximco Pharma Oncology: Innovation, Safety, and Quality in cancer care.

BEXIMCO PHARMA ONCOLOGY Proudly introduces

To **Conquer Complicated Cancers** with **Ultimate Anti-VEGF mAb therapy**

Abevmy®

Bevacizumab injection

100 mg / 4 mL
400 mg / 16 mL

DISCONNECT CONNECT



Biosimilar Bevacizumab

BEXIMCO PHARMA ONCOLOGY offers

For the management of HER2 +ve Breast cancer

Ogivri™ 440

Trastuzumab 440 mg Lyophilized Powder for Injection

Tested and **Trusted** Trastuzumab brand

The First
US FDA & EMA
Approved
Biosimilar Trastazumab Brand
in Bangladesh



A premium US FDA and EMA approved Trastuzumab with proven efficacy

Similar activity ensures equivalent outcome to reference product

Similar structure ensures equivalent purity, efficacy & safety compared to reference product

BEXIMCO PHARMA ONCOLOGY

Rituximab Mabrix®

100mg/Vial & 500mg/Vial

Committed To Precision For Complete Remission



CREATING BREAKTHROUGHS
FOR **CD20⁺ MALIGNANCIES**



With the best compliments of

KISQALI®
ribociclib



Novartis (Bangladesh) Limited
has been renamed as
Nevian Lifescience PLC

This transition ensures, patients in Bangladesh will have continued access to Novartis' global brands manufactured under-license using the same process, under the same quality standards, at the same facility, as well as through import and distribution of Novartis' innovative life-saving medicines under the banner of **Nevian Lifescience PLC.**

NEVIAN
LIFESCIENCE

KISNEV/BGD/0028/05-25(V1.0)-38

PrezuMab™

Pembrolizumab INN IV Infusion

Unleashing the Immune Response



ImmunoMab™

Nivolumab INN IV Infusion

Ignites the Inner Defense



State-of-the-art Manufacturing Facility

Similar Efficacy to Originator

Bioassay Tested

pharmacil

PHESGO®

PERTUZUMAB-TRASTUZUMAB

Roche

A combination of 2 monoclonal antibodies
(pertuzumab and trastuzumab) in 1 fixed dose SC injection

A new era of treatment for **HER2+ breast cancer patients** where **innovation** meets **convenience**

Lifting care beyond medicine



Enhanced Safety Reporting for Pregnancies Exposed to PHESGO

If a pregnant woman is treated with Phesgo, or if a patient becomes pregnant while receiving Phesgo or within 7 months following the last dose of Phesgo, please immediately report pregnancy to the local Roche Adverse Event Line at +8801766686086 and / or bangladesh.drugsafety@roche.com. Additional information will be requested during a Phesgo-exposed pregnancy and the first year of the infant's life. This will enable Roche to better understand the safety of Phesgo and to provide appropriate information to health authorities, healthcare providers and patients.

Adverse event / Safety reporting:
In case you come across any adverse event with Roche medicinal products please report the adverse event immediately.
E-mail:bangladesh.drugsafety@roche.com **24hour contact no:**8801766686086

Circulated with the prior approval of the Directorate General of Drug Administration.

For any product or therapeutic area related information and full product information please email at bangladesh.medinfo@roche.com

Phesgo is a trademark of and manufactured for F. Hoffmann-La Roche Ltd, Grenzacherstrasse 124, 4070 Basel, Switzerland and imported by Radiant Business Consortium Limited, 474 P, Road No 3, Sector 12 Uttara, Dhaka, Bangladesh.

References: Phesgo Product Information, June 2025

Full Product Information

Registered product of

Roche Bangladesh Limited
Workplace 237A, Level E1 (South), Topgear Gulshan Link Road, Tejgaon I/A, Dhaka-1208, Bangladesh.
Tel: +8809858403039, www.roche.com.bd

Promotion Partner

RADIANCE

Radiant Pharmaceuticals Limited
103, Tower, Level (5&6), 7 VIP Road, Mohakhali, Dhaka-1206, Bangladesh.
Phone: +8809613515713

M-ED-00008800

Innovations of

F. Hoffmann-La Roche Ltd.



Registered product of

Roche Bangladesh Limited

Promotion Partner

RADIANT PHARMACEUTICALS

Radiant Pharmaceuticals Limited

World-Class

PEMBROLIZUMAB

Now within **our Reach**

Pemab™

Pembrolizumab INN IV Injection

Advanced Quality Across Cancer Care

- Proven Clinical Efficacy
  Across Multiple Cancers
- Manufactured in a
  WHO GMP-Compliant Dedicated Facility
- Absolute Sterility with
  Advanced RABS Technology
- Quality Certified via
  International Standard BioAssay



SK+F BIOLOGICS

ESKAYEF PHARMACEUTICALS LTD.



ACCURAY

Made in USA



Radixact®

The Radixact® System combines real-time CT imaging with continuous 360-degree helical radiation delivery to treat tumors with high precision.

CyberKnife®

The CyberKnife System is a non-invasive, robotic radiation therapy device that treats tumors anywhere in the body without cutting or anesthesia.

Made in Belgium



- Energy: 28.5 - 29.5 MeV
- Production power: Up to 2 x 200 μAe / 2 x 100 μA particle
- Current: Up to 2 x 200 μAe / 2 x 100 μA particle

Cyclone® iKure

Precision Against Cancer

Cyclone® iKure is a high-energy cyclotron dedicated to At-211 production, supporting the growing demand for alpha-emitting radioisotopes.

ZEISS Made in Germany



INTRAOPERATIVE RADIOTHERAPY (IORT)

INTRABEAM® 600

INTRABEAM 600 is an advanced radiotherapy system used during cancer surgery. Right after the tumour is removed, a tiny device delivers radiation straight to the area at risk. Planning, treatment and dose check are all done in the same operation.

Tradevision LIMITED

Technology to SMART Life & Living

Sales Hotline 017-0123-0000

Service Hotline 017-5564-5555

Corporate Office: House # 407, Lane # 29, New DOHS Mohakhali, Dhaka-1206, Bangladesh

www.tvlbd.com

info@tvlbd.com

@myTVLBD

ONE PLATFORM, INFINITE POSSIBILITIES

Xelpac PREMIUM & DoceXan

where ORIGINATOR'S API THRIVES

Elevate Your Experience
with API Harmony from
INDENA, ITALY

সেবার ব্যবধান পেরিয়ে
ক্যান্সারকে দেবো হারিয়ে

BEACON
Light for life
ক্যান্সার চিকিৎসার ঐতিহ্যে সর্বপ্রথম ও সর্বাধুনিক

“DEVOTED TO INNOVATION, COMMITTED TO QUALITY”

Offering **Modern Innovations** in Cancer Treatment **Since 2021**

IMMUNOTHERAPY

The Master-Key of Cancer Treatment



NIVOMAB
Nivolumab Injection

PEMRO
Pembrolizumab INN

সেবার ব্যবধান পেরিয়ে
ক্যান্সারকে দেবো হারিয়ে

BEACON
Light for life
ক্যান্সার চিকিৎসার ঠাঁইয়ে সর্বাধুনিক ও সর্বাধুনিক

NO WAIT TO drop
TESTOSTERONE





Indications

- Patients with Advanced Prostate Cancer (APC).

Degarelix Acetate INN

Degrel

Tresoda™

Trastuzumab 150 & 420 mg

Bangladesh's First Oncology Biosimilar

Manufactured with Own API



A New Era of Oncology Innovation

Incepta Pharmaceuticals Ltd

Bringing global pioneers to you

Proven oncology therapies from Germany and South Korea, standing with clinicians in the fight against breast cancer.



ERIBULIN · MADE IN GERMANY

Eribulin AqVida

0.88 mg / 2 mL

(0.44 mg/mL) solution for injection · 1 vial per pack · AqVida GmbH



TRASTUZUMAB · MADE IN SOUTH KOREA

Herzuma®

420 mg / 150 mg

Powder for concentrate for solution for infusion · Celltrion Healthcare



FULVESTRANT · MADE IN GERMANY

Fulvestrant EVER Pharma

500 mg dose

2 × 250 mg/5 mL pre-filled syringes for intramuscular use

Z A S Corporation Ltd.

COMPLETING

THE CIRCLE OF CARE

OPTIMIZING OUTCOMES



Taxopac® Paclitaxel USP | **Renacarb®** Carboplatin | **Paltab®** Palbociclib | **LAPAREN®** Lapatinib

- Quality-Assured APIs (US DMF, CEP, CEP iCOS)
- Manufactured in Dedicated and Cutting Edge Factory
- Fully Automated and Human Touch Free Production with Advanced Isolator Technology
- Highest Standard Cold Chain Maintenance

RENATA PLC

Charting More Possibilities in Immuno-oncology



BLOCK PD-1.
UNLEASH THE T-CELL.

PEMOMAB
Pembrolizumab INN

Currently approved for 44 indications across 19 different cancer types

- **FIRST-LINE NSCLC**
  Extends overall survival
- **ADJUVANT RCC**
  Reduced risk of recurrence in high-risk patients.
- **TNBC**
  Standard of care in both early-stage and advanced settings

Nivamo
Nivolumab INN

UNLOCK the Body's Power to Fight

- **METASTATIC MELANOMA**
  Overall survival & reccurence prevention
- **NON-SMALL CELL LUNG CANCER**
  Both as a first-line & second-line option
- **RENAL CELL CARCINOMA AND OTHERS**
  Improves overall survival & complete response.

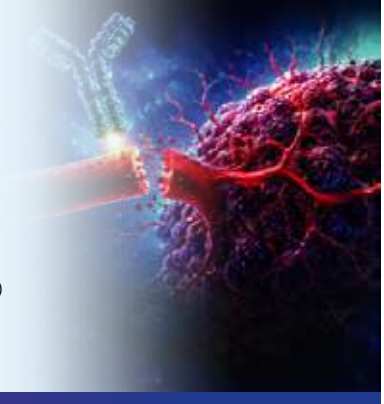
AVASTEX
Bevacizumab INN

100 mg/4 ml
400 mg/16 ml

Precision Proven Anti-VEGF Therapy



Biosimilar



- Biosimilar Bevacizumab (Trial CTRI/2013/05/003699)
- Equivalent safety and efficacy to the originator brand

ZISKA PHARMA **Ziska Pharmaceuticals Ltd.**
www.ziskapharma.com

Oncology & Biotech

Your Journey
Our Promise

Opsonin
Oncology

COMING SOON

Opsonin Oncology-Where State of the
Art Technology Meets Oncology Excellence



"Like" us on
facebook
.com/OpsoninPharma

Opsonin Pharma
Ideas for healthcare

FURTHER INFORMATION IS AVAILABLE FROM:
Opsonin Pharma Limited
Product Management Department, Opsonin Building
30 New Eskaton, Dhaka 1000, Visit our website: www.opsonin-pharma.com

strand

26 YEARS OF INNOVATION

CAP ACCREDITED

A Comprehensive Oncology Diagnostics Portfolio

From genomic profiling to precise disease monitoring, powering personalised cancer care across the continuum.



Diagnostics – Oncology Tests Portfolio

Hereditry / Germline (30+ Tests)

- BRCA 1 & BRCA2
- HBOC Panels (20-gene panel)
- Germline HRR
- HCT (137-gene panel)
- HCT Plus (137-gene panel + digital MLPA for 26 genes))
- MLPA panel
- MST & MLPA

Solid Cancers Somatic Test Portfolio (70+ Tests)

- SA500 I Nexus / Nexus Plus (Tissue & Liquid Biopsy)
- SA74 Tissue and Liquid Biopsy
- Somatic BRCA 1 & BRCA2
- Cancer-Specific Panels (Breast, Ovarian, Lung, Colorecttal, Sarcoma, Endometrial, Uro-oncology, Thyroid, Glioma)
- Immunotherapy Markers (TMB by NGS, MSI by NGS/PCR, PD-L1)

Hematology Molecular Test Portfolio (45+ Tests)

- Pan-Heme Tests
- Myeloid-Related Tests
- Lymphoid-Related Tests
- Transplant Genetic Tests
- Germline Hematology Tests

NexusMRD (Tumour-Informed)

Ultrasensitive, personalised monitoring for treatment response and early detection of recurrence.

Supporting personalised cancer care through

- Expert Genetic Counselling
- Multidisciplinary Molecular Tumor Board

Multi-omic expertise | Validated, high-quality assays | Actionable clinical insights | Global reach (22+ countries)

+880 1714774887 | +880 1797806669 | marketing@strandls.com | www.strandls.com

best of 8 SABCS®

ORGANIZING PARTNERS

BANGLADESH SOCIETY FOR BREAST CANCER STUDY BSBCS

ENCORE MEDICAL EDUCATION

Conference secretariat

BSH BANGLADESH SPECIALIZED HOSPITAL
because you are special

+88 01973 115 575
info.bsbcs@gmail.com
www.bsbcs.info