OncoEdu
Research | Education | Treatment

BANGLADESH SOCIETY FOR BREAST CANCER STUDY BSBCS

5TH BBCC

BANGLADESH BREAST CANCER CONFERENCE 2025

Friday, 28 February 2025 | Pan Pacific Sonargaon Dhaka, Bangladesh

Organized by
BANGLADESH SOCIETY FOR BREAST CANCER STUDY (BSBCS)

BANGLADESH BREAST CANCER CONFERENCE 2025

TOUCHING LIVES
to the **Power of Cure**

সেবার ব্যবধান পেরিয়ে
ক্যান্সারকে দেবো হারিয়ে

BEACON®
Light for life
ক্যান্সার চিকিৎসার ঔষধে সর্বপ্রথম ও সর্বাধুনিক

TABLE OF CONTENT

WELCOME MESSAGE

Prof. Dr.
Don S. Dizon

CHIEF GUEST

Bangladesh Breast Cancer Conference-2025

Professor of Medicine and Professor of Surgery
Brown University, Lifespan Cancer Institute and the
Legorreta Cancer Center, USA

It is indeed a matter of great pleasure that, Bangladesh Society for Breast Cancer Study (BSBCS) is going to organize 5th Bangladesh Breast Cancer Conference on 28th February 2025 at Pan Pacific Sonargaon Hotel, Dhaka.

Breast Cancer has turned out to be one of the top category cancers and has ranked as the third deadly on the list for both men and women in Bangladesh. Around 12,764 patients are newly diagnosed with Breast Cancer each year and mortality rate has been increased to 6,846. And this situation is getting worse day by day. According to International Agency for Research on Cancer (IARC), 65.5% of Breast Cancer Patients are delayed in their diagnosis by more than six months due to unawareness of the people, improper screening and furthermore poor socioeconomic infrastructure and atmosphere which is uprising the incidents in Bangladesh.

I offer my heartiest gratitude to the organizing committee of Bangladesh Breast Cancer Conference 2025 for taking such good steps and creating a room of knowledge for our oncologists.

I wish a grand success to BSBCS and hope all the participants will have a great time over the event.

Prof. Dr. Don S. Dizon

Prof. Dr. M.A. Hai

PATRON

Bangladesh Society for Breast Cancer Study (BSBCS)

Ex-President
SAARC Federation of Oncology
& Chairperson of Oncology Club of Bangladesh, Director (Rtd)
National Institute of Cancer and Research Hospital, Dhaka

Distinguished Guests, Esteemed Colleagues, and Honorable Delegates,

Good morning, and a warm welcome to each of you. It is a privilege to stand before you at this significant Breast Cancer Conference here in Dhaka, Bangladesh. I extend my heartfelt appreciation to our esteemed speakers, delegates, and participants both local and international who have joined us for this vital gathering.

This conference serves as a crucial platform for surgeons, medical oncologists, radiation oncologists, medical physicists, and allied specialists to stay at the forefront of breast cancer management. Our primary focus is to explore the latest advancements in early detection, treatment strategies, and patient-centered care, while strengthening collaboration in our shared mission to combat this disease.

The impact of this event is profound. It provides an exceptional opportunity for medical professionals to engage with global experts, gain cutting-edge knowledge, and exchange best practices in breast cancer care. These insights will directly contribute to enhancing clinical practices, improving patient outcomes, and fostering a stronger, multidisciplinary approach to treatment.

As we embark on these discussions and workshops, I encourage each of you to actively participate—ask questions, share ideas, and collaborate. The knowledge and connections you cultivate here will not only benefit your practice but also advance breast cancer care in Bangladesh and beyond.

Once again, thank you all for being here. I look forward to the inspiring conversations and groundbreaking solutions that will emerge from this conference. Together, we can make a meaningful difference in the fight against breast cancer.

Professor Dr. M.A. Hai

PATRON

Bangladesh
Society for Breast Cancer Study (BSBCS)

Prof. Dr. Sanawar Hossain

Past President
Bangladesh College of Physician and Surgeons
& Medical Advisor of Square Hospital Limited

Seeing the 5th International Conference on Breast Cancer titled as 'Bangladesh Breast Cancer Conference 2025 on 28th February 2025 is greatly delightful and encouraging.

Breast cancer is the most prevalent cancer among women worldwide and in Bangladesh as well.

According to reports, Bangladeshi women between the age of 30-44 years have the maximum risk of getting breast cancer (19.3 per 100000). It has become a hidden burden which accounts for almost 7% cancer death among women.

One of the important reasons of high morbidity and mortality is lack of screening program for early detection of disease. Lack of awareness, improper information about the course of treatment and inability to afford costly treatment all contribute and complicate further management. Lack of multidisciplinary approach and trained skilled nurses also make comprehensive care to breast cancer patients difficult.

Being a patron of the organizing committee for the Bangladesh Breast Cancer Conference 2025 is an honor. Bangladesh Society for Breast Cancer Study (BSBCS) has my heartfelt gratitude for organizing this international conference.

I strongly expect this conference will give us current knowledge on breast cancer management and mark a turning point for participants in applicable sectors. I congratulate the attendees and organizers on the event's outstanding success.

Prof. Dr. Sanawar Hossain

Prof. Dr. Qamruzzaman Chowdhury

PRESIDENT

Bangladesh Society for Breast Cancer Study (BSBCS)

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)

Welcome to the 5th Breast Cancer Conference, organized by the Bangladesh Society for Breast Cancer Study. This event reflects our commitment to advancing breast cancer research, awareness, and treatment.

Today, we gather to discuss the latest advancements in diagnostics, treatment, and patient care, while emphasizing early detection and equitable healthcare access. Your participation is key to driving progress in the fight against breast cancer.

I sincerely thank our organizing committee, sponsors, and all contributors, including our esteemed invited faculties from the USA, UK, Australia, Singapore, and other Asian countries, for their invaluable support. Let's collaborate, learn, and work toward a future where breast cancer is no longer life-threatening.

Prof. Dr. Qamruzzaman Chowdhury

Dr. Md. Salim Reza

VICE PRESIDENT

Bangladesh
Society for Breast Cancer Study (BSBCS)

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

I would like to grab this moment to welcome you all to the 5th Bangladesh Breast Cancer Conference 2025, which will be hosted on 28th February 2025 at Pan Pacific Sonargaon in Dhaka, on behalf of the organizing committee.

In Bangladesh, the incidence of breast cancer patients is rising at an alarming pace, especially among women after the cervical cancer. Males also have a probability of developing breast cancer. As a result, we have planned this conference so that everyone may have a thorough understanding of the most recent developments in treating breast cancer as well as the many aspects of illness management.

We are thankful and blessed to have speakers from several nations participating in this conference, who will serve as keynote speakers in various sessions and share their expertise in radiation oncology, medical oncology, breast surgery, breast pathology, and palliative care. Additionally, our home specialists will discuss their methods of treating breast cancer as well as their experiences in the field.

Without the outstanding assistance of our stakeholders, organizing a grant event like this would not have been possible, thus I think their names have to be acknowledged. All the pharmaceutical companies and diagnostic labs deserve my sincere gratitude for their kind assistance. Moreover, we appreciate the tireless assistance, support, and guidance provided by our committed employees, coworkers, friends, and families during the preparation and execution of this event. Besides that, we would like to express our gratitude to the print and electronic media for attending and covering the event.

I hope and think that this event will be able to convey broad knowledge to treat breast cancer, and through the dynamic engagement with each other from the various nationalities will inspire the sharing of ideas and knowledge, which I feel is beneficial for all of us. Last but not least, I want to express my hope and belief that we will all enjoy the conference and our hospitality in the stunning city of Dhaka, the center of Bangladeshi culture, on behalf of the organizing committee for the fourth BBCC 2025.

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

DR. S. M.
KHODEZA
NAHAR BEGUM
Executive Member

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

DR.
SHAFATUJJAHAN
Executive Member

DR.
SADIA SHARMIN
Executive Member

BSBCS

ORGANIZATION MEMBERS

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

A. S. M. SHAIFUL ISLAM
Executive Member

INVITED SPEAKERS

PROF. DR. DON S. DIZON
MD, FACP, FASCO
Professor of Medicine & Surgery, Brown University
Director, Pelvic Malignancies Program
Lifespan Cancer Institute, Director, Medical Oncology
Rhode Island Hospital

PROF. DR. IAN KUNKLER
Consultant
Clinical Oncology
Edinburgh Cancer Centre
University of Edinburgh, Edinburgh
Scotland, UK

PROF. DR. ISMAIL JATOI
MD, PhD, FACS
Dale H. Dorn Chair in Surgery
Professor, Division of Surgical Oncology
and Endocrine Surgery University of
Texas Health Science Center

PROF. PETER SCHMID
FRCP, MD, PhD
Professor of Cancer Medicine
Royal college of Physicians
Centre lead, Group leader

PROF. DR. PAUL MAINWARING
MBBS, MD, FRACP
Co-Founder Executive Chairman & CEO
XING Group Holdings Pty Ltd
Brisbane, QLD Australia
Consultant, Medical Oncologist ICON Cancer Care

DR. NICHOLAS ZDENKOWSKI
BMed, FRACP, PhD
Medical Oncologist, Hunter Valley Oncology
Newcastle Australia
Conjoint Senior Lecturer University of Newcastle, Australia

PROF. RAJESH BALAKRISHNAN
MD, DNB
(Radiation Oncology)
Professor and Head of Unit III
Department of Radiation Oncology
Christian Medical College, Vellore, India

DR. JABED IQBAL
Associate Professor
Senior Consultant
Department of Anatomical Pathology
Singapore General Hospital

DR. MD. ZAKER ULLAH
Consultant
Oncoplastic Breast & General Surgeon
The Harley Street Clinic
The Holly Private Hospital
Barts Health NHS Trust

JOANNE NGEOW YUEN YIE
BMedSci, MBBS, FRCP, MPH, FAMS
Associate Professor
Senior Consultant, Division of Medical Oncology
National Cancer Centre, Singapore

DR. MA JUN
Consultant
Division of Medical Oncology
National Cancer Centre
Singapore

DR. SEE HUI TI
Senior Consultant
Medical Oncologist
Parkway Cancer Centre
Singapore

DR. TAN SI YING
Consultant Surgical Oncologist
in the Department of Breast Surgery
in both Singapore General
Hospital and National Cancer Centre, Singapore

DR. GRACE KUSUMAWIDJAJA
Professor
Consultant
Radiation Oncology
National Cancer Centre, Singapore

DR. AMAR DESHPANDE
Senior Surgical Oncologist
TATA Memorial Center
Mumbai, India

DR. DODUL MONDAL
Director & Clinical Administrator
Department of Radiation Oncology
Max Super Speciality Hospital
Saket, Delhi, India

PROF. GOLAM ABU ZAKARIA
Professor of
Clinical Engineering
University of Applied Sciences
Koethen, Germany

DR. RASHMI CHAND
Consultant radiologist and
Incharge of Oncoradiology
Apollo Multispeciality Hospital, Kolkata

ZUBIN RUSSY MASTER
Sr. Principal Radiation Physicist
National Cancer Centre
Singapore

BANGLADESH BREAST CANCER CONFERENCE 2025

SCIENTIFIC PROGRAM

PRE CONFERENCE SCHEDULE

27 FEBRUARY 2025

LIVE SURGERY | **CONFERENCE HALL (DMCH)**

8:00 AM - 2:30 PM	BREAST CANCER SURGERY
Moderator	Prof. Dr. Ismail Jatoi | Dr. Md Zaker Ullah | Prof. Dr. Salma Sultana
Panel of Expert	Prof. Dr. Ahmed Sayeed | Prof. Dr. Saif Uddin Ahmed Prof. Dr. Mizanur Rahman | Prof. Dr. A F M Anwar Hossain Prof. Dr. Rayhana Awwal Sumi | Prof. Dr. Feroze Quader
Chairperson	Prof.Dr. M A Majid

RADIOTHERAPY SESSION | **SURMA**

4.00 PM - 5.30 PM			
Speaker	Dr. Dodul Mondal | Prof. Dr. Rajesh Balakrishnan		
Panel of Expert	Prof. Dr. Don S Dizon | Dr. Hasan Murshed		
Chairperson	Prof. Dr. Ian Kunkler	Moderator	Dr. Shariful Islam Jhonny

RADIOLOGY SESSION | **PADMA**

5.30 PM - 7.00 PM			
Speaker	Dr. Rashmi Chand		
Panel of Expert	Prof. Dr. Sharmin Akhtar Rupa | Prof. Brig Gen (Retd.) Jahangir Alam		
Chairperson	Prof. Brig Gen Dr. S M A Al-Muid (Rtd.)	Moderator	Dr. Shafatujjahan

PATHOLOGY SESSION | **SURMA**

5.30PM - 7.00PM			
Speaker	Prof. Dr. Jabed Iqbal | Prof. Dr. S M Khodeza Nahar Begum		
Panel of Expert	Prof. Dr. Salauddin Ahmed | Dr. Joanne Ngeow Yuen Yie Dr. Farida Arjuman | Prof. Dr. Paul Mainwaring		
Chairperson	Prof. Dr. Mohammad Golam Mostafa	Moderator	Dr. Fariah Sharmeen

INAUGURAL SESSION

09:00 AM - 09:30 AM

PAN PACIFIC SONARGAON DHAKA, BANGLADESH

TOPICS	Welcome Address by Vice President
SPEAKER	Dr. Md. Salim Reza
TOPICS	Address by Patron
SPEAKER	Prof. Dr. Sanawar Hossain
TOPICS	Address by Patron
SPEAKER	Prof. Dr. M A Hai
TOPICS	Address by Special Guest
SPEAKER	Humaira Islam, PhD
TOPICS	Address by Special Guest
SPEAKER	Prof. Dr. Ismail Jatoi
TOPICS	Address by Chief Guest
SPEAKER	Prof. Dr. Don S. Dizon
TOPICS	Address by President
SPEAKER	Prof. Dr. Qamruzzaman Chowdhury

SESSION NAVIGATOR

Dr. Latifa Sultana

PROGRAM SCHEDULE

SESSION 01

PLENARY 01 | BALL ROOM

Time	Topics	Speaker
09:30 AM - 10:00 AM	Management of TNBC	Prof. Dr. Don S. Dizon
10:00 AM - 10:30 AM	Estrogen Receptor Negative and Triple Negative Breast Cancer: Epidemiological and Surgical Considerations	Prof. Dr. Ismail Jatoi
10:30 AM - 11:00 AM	Update on adjuvant radiotherapy for early breast cancer, focussing on the results of PRIME II and BIG 2.04 MRC SUPREMO trials	Prof. Dr. Ian Kunkler
Panel of Expert	**Prof. Dr. Raju Titus Chacko | Prof. Dr. Ahmed Sayeed Prof. Dr. Rajesh Balakrishnan | Brig. Gen. Prof. Dr. Md Yousuf Ali**	

Chairperson	Moderator
Prof. Dr. Md Mokhles Uddin	**Dr. Shafatujjahan**

11:00 AM - 11:30 AM  **TEA BREAK**

SESSION 02

PLENARY 02 | BALL ROOM

Time	Topics	Speaker
11:30 PM - 12:00 PM	Update on systemic therapy for estrogen receptor positive, HER2-negative breast cancer	Prof. Dr. Nicholas Zdenkwoski
12:00 PM - 12:30 PM	Young Women with Breast Cancer and special considerations	Dr. Tan Si Ying
12:30 PM - 01:00 PM	YoWo - the young woman's programme	Dr. Ma Jun
Panel of Expert	**Prof. Dr. Salma Sultana | Maj. Gen (RTD) Prof. Dr. Md. Azizul Islam Prof Dr. Kazi Manzur Kader | Dr. Md. Jahangir Kabir**	

Chairperson	Moderator
Prof. Dr. Parveen Shahida Akhtar	**Dr. Lubna Mariam**

01:00 PM - 02:30 PM  **LUNCH & PRAYER**

01.00 PM - 02.30 PM	POSTER PRESENTATION
Panel of Expert	Dr. Md. Zaker Ullah | Dr. Ferdous Ara Begum Dr. Hasan Murshed | Dr. Md. Salim Reza

SESSION 03 | ADVANCED BREAST CANCER

PARALLEL 1 | BALL ROOM 01

Time	Topics	Speaker
02:30 PM - 03:00 PM	Management of Non Metastatic Her 2 Over-expressed Breast Cancer	Dr. See Hui Ti
03:00 PM - 03:30 PM	Pembrolizumab for Early Triple-Negative Breast Cancer	Dr. Peter Schimd
03:30 PM - 04:00 PM	Hypofraction for Breast Radiotherapy	Prof. Dr. Grace Kusumawidjaja
Panel of Expert	Prof. Brig Gen (RTD) Dr. Md Quadrat E Elahi | Dr. Ferdous Shahriar Sayed Prof. Dr. Nizamul Haque | Lt. Col. Dr. S M Rokonuzzaman	

Chairperson	Moderator
Prof. Dr. Md Mofazzel Hossain	Dr. Bhaskar Chakraborty

SESSION 03 | PERSONALIZED MEDICINE

PARALLEL 2 | BALL ROOM 02

Time	Topics	Speaker
02:30 PM - 03:00 PM	Quality Assurance of Breast Biomarkers Assays in Immunohistochemistry: Adapting Standards for Bangladesh Laboratories	Prof. Dr. Jabed Iqbal
03:00 PM - 03:30 PM	Standard practice in pathological evaluation of RCB in breast specimen	Prof. S M Khodeza Nahar Begum
03:30 PM - 04:00 PM	Plan evaluation in early breast cancer in the era of hypofractionated radiation	Dr. Dodul Mondal
Panel of Expert	Prof. Dr. Md. Ehteshamul Hoque | Prof. Dr. Naziruddin Mollah Prof. Dr. Sajjad Md. Yusuff | Prof. Dr. M Kamal Uddin	

Chairperson	Moderator
Dr. Parvin Akhter Banu	Dr. Md Abdul Mannan

SESSION 03 | ORAL ABSTRACT SURGERY & TUMOR BOARD

PARALLEL 3 | PADMA

Time	Topics	Speaker
02:30 PM - 02:50 PM	Is BCS Safe in TNBCs	Dr. Amar Deshpande
02:50 PM - 03:00 PM	Experience of Rare Metaplastic Breast Cancer Case series	Prof. Dr. Salma Sultana
03:00 PM - 03:10 PM	Short term outcomes of oncoplastic breast surgery at a tertiary cancer centre in Bangladesh	Dr. Hasan Shahriar Md. Nuruzzaman
03:10 PM-03:20 PM	Novel Development in Breast Radiotherapy in Bangladesh: Challenges in Intraoperative Radiotherapy by a Breast Onco-surgeon	Dr. Ali Nafisa
03:20 PM - 03:30 PM	Portable ultrasound as an important peri operative tool for surgeons as tumour localization and ensuring tumour free margin during BCS or wide local excision.	Dr. Leea Amin
03:30 PM - 03:40 PM	Survival probabilities of breast cancer patients beyond serial axillary node dissection â€“ A prospective study	Dr. A K Mostaque
03:40 PM-03:50 PM	Oncoplastic Breast Surgery: Median 36-Month Follow Up Results.	Dr. A K M Minhaj Bhuiyan
03:50 PM - 04:00 PM	Scope of Advanced Breast Cancer Surgery in a Govt. Hospital - A Single Centre Experience	Dr. Sharmin Islam
04:00PM -04:10PM	Comparative Study Between Imprint Cytology and Frozen Section Biopsy for Intraoperative Assessment of Sentinel Lymph Node in Breast Cancer	Dr. Noor E Alam

Panel of Expert

Prof. Dr. Don S. Dizon | Prof. Dr. Ismail Jatoi
Dr. Md. Zaker Ullah | Prof. Dr. A F M Anwar Hossain
Prof. Dr. Jabed Iqbal | Prof. Dr S M Khodeza Nahar Begum
Dr. Dodul Mondal | Prof Dr Md Golam Mostafa | Prof. Ian Kunkler

Chairperson	Moderator
Prof. Dr. Rayhana Awwal Sumi **Prof. Dr. Saif Uddin Ahmed**	**Dr. Hasan Shahriar Md Nuruzzaman Kallol** **Dr. Sharmin Islam**

SESSION 03 | MEDICAL PHYSICS

PARALLEL 4 | SURMA

Time	Topics	Speaker
02:30 PM - 02:50 PM	Advances in Breast Cancer Radiotherapy: 3D, photon Arc and Proton Therapy at NCCS	Zubin Russy Master
02:50 PM - 03:05 PM	Radiotherapy for Breast Cancer: A Medical Physicist's Perspective on Precision, Safety, and Quality	Dr. Md Akhtaruzzaman
03:05 PM - 03:15 PM	AI Driven Auto Contouring and Planning for Breast Cancer Radiotherapy: A Feasibility Study on Geometric and Dosimetric Accuracy	Dr. Md Anwarul Islam
03:15 PM - 03:25 PM	Experience of Hybrid Planning Technique in Breast Cancer Radiotherapy	Mr. Md Abu Kausar
03:25 PM - 03:35 PM	Development of a Cost-Effective Homemade Device as an Alternative to MRI Breast Coils for Breast Cancer Detection	Mr. Md Mokhlesur Rahman
03:35 PM - 03:45 PM	Simultaneous Integrated Boost vs. Sequential Boost in Breast Cancer Radiotherapy: A Comprehensive Analysis of Dosimetric, Radiobiological, and Cost-Effectiveness	Mr. Md Jobairul Islam
03:45 PM - 03:55 PM	Effect of Bolus in Post-Mastectomy Chest-Wall Irradiation: A Retrospective Cross-sectional Study	Mr. Md Fajle Rabby

Panel of Expert

Dr. Md Rashid Un Nabi | Dr. Muhammad Masud Rana
Dr. Md Akhtaruzzaman

Chairperson	Moderator
Prof. Dr. Golam Abu Zakaria **Prof Dr Hasin Anupama Azhari**	**Dr. Jannatul Ferdause**

04:00 PM - 04:30 PM  **TEA BREAK**

SESSION 04 | PERSONALIZED MEDICINE

PARALLEL 1 | BALL ROOM 01

Time	Topics	Speaker
04:30 PM - 05:00 PM	Cancer Genomic Medicine : Lessons in Implementation	Dr. Joanne Ngeow Yuen Yie
05:00 PM - 05:30 PM	Treatment of metastatic breast cancer; The case for precision medicine	Prof. Dr. Paul Mainwaring
05:30 PM - 06:00 PM	De-escalating breast and Axillary surgery after neoadjuvant chemotherapy	Dr. Md Zaker Ullah

Panel of Expert

Prof. Dr. Md Abul Ahsan Didar | Dr. Shahida Alam Lima
Dr. A F M Kamal Uddin | Dr. Ali Asgor Chowdhury
Dr. Sadia Sharmin

Chairperson	Moderator
Prof. Dr. Syed Md Akram Hussain	**Dr. Rubama Karim**

SESSION 04 | ORAL ABSTRACT

PARALLEL 2 | BALL ROOM 2

Time	Topics	Speaker
04:30 PM - 4:45 PM	Port-A-Cath : A Real Life Study in Patients Receiving Chemotherapy â€“ Single Centre Experience, to Access Efficacy, Safety & Impact on Quality of Life	Dr. Faisal Shahriar
04.45 PM - 5.00 PM	Clinico-Demographic Characteristics of CA 15-3 Biomarker Positive Recurrent Breast Carcinoma Patients	Dr. Rawnok Jahan Kabir
05.00 PM - 5.15 PM	Evaluating the Success of Current Standard of Care in Breast Cancer Treatment: A Retrospective Study in Bangladesh	Dr. Arifur Rahman
05.15 PM - 5.30 PM	Hypofractionated radiotherapy for 5 week 50 gy versus 3 week 40 gy in locally advanced Breast cancer in Bangladeshi woman of breast cancer at a tertiary level hospital in Bangladesh.	Dr. Rowshon Ara Begum
5.30 PM-5.45 PM	Hypofractionated Radiotherapy in Post Operative Breast Cancer Patients. 03 Years Clinical Experience in a Newly Established Cancer Center	Dr. Shaila Sharmin
5.45 PM-6.00 PM	Real-Life Retrospective Single-Arm Study of Postpartum Breast Cancer: Epidemiological Insights into Uncommon and Critical Cases in Bangladesh	Dr. Suriana Sultana

Panel of Expert

Prof. Dr. Tapesh Kumar Paul | Dr. A K M Minhaj Uddin Bhuiyan
Dr. Ashim Kumar Sengupta | Dr. Biswajit Bhattacharjee

Chairperson	Moderator
Prof. Dr. Md Moarraf Hossen	**Dr. Shamima Afroz Trina**

SESSION 04 | SURGERY TUMOR BOARD CONTINUE

PARALLEL 3 | PADMA

Time	Topics	Speaker
04:00 PM - 04:30 PM	Challenging case with Fibromatosis Breast Cancer	Dr. Hasan Shahriar Md Nuruzzaman Kallol
04.30 PM-05.00 PM	De-Novo metastatic Her 2 Breast Cancer with complete radiological response of initial management	Dr. Ayesha Siddiqua
05:30 PM-06:00 PM	Pretreated case with local failure of synchronus bilateral breast	DMCH

Panel of Expert

Prof. Dr. Don S. Dizon | Prof. Dr. Ismail Jatoi
Dr. Md. Zaker Ullah | Prof. Dr. A F M Anwar Hussain
Prof. Dr. Jabed Iqbal | Prof. Dr. S M Khodeza Nahar Begum
Dr. Dodul Mondal | Prof. Dr. Mohammad Golam Mostafa
Prof. Dr. Ian Kunkler

Chairperson	Moderator
Prof. Dr. Rayhana Awwal Sumi	**Dr. Hasan Shahriar Md Nuruzzaman Kallol** **Dr. Ayesha Siddiqua	Dr. Sami Al Hasan** **Dr. Sadia Afrin**

SESSION 04 | ORAL ABSTRACT (BASIC SCIENCE)

PARALLEL 3 | SURMA

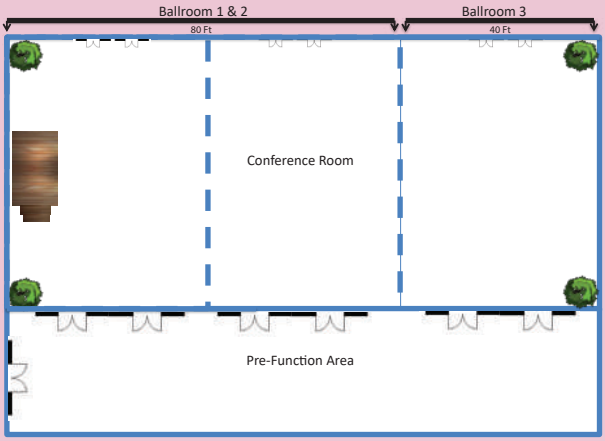
Time	Topics	Speaker
04:30 PM - 04:45 PM	Effect of XRCC1 Gene Polymorphism (rs1799782) on Response and Toxicities of Chemotherapy in Bangladeshi Breast Cancer Patients	Md. Shihad Al Shariar
04:45 PM - 05:00 PM	Breast Cancer Detection with Explainable AI: Grad-CAM and Bounding Box-Based Interpretability	Samrat Kumar Dev Sharma
05:00 PM - 05:30 PM	Importance of Genetic Testing in Triple Negative Breast Cancer: Insights from a real-life cohort	Germany
05:30 PM - 05:45 PM	Multimodal AI for Breast Cancer Diagnosis: Precision Segmentation and Comprehensive Report Generation from Mammograms.	Dr. Monir

Panel of Expert

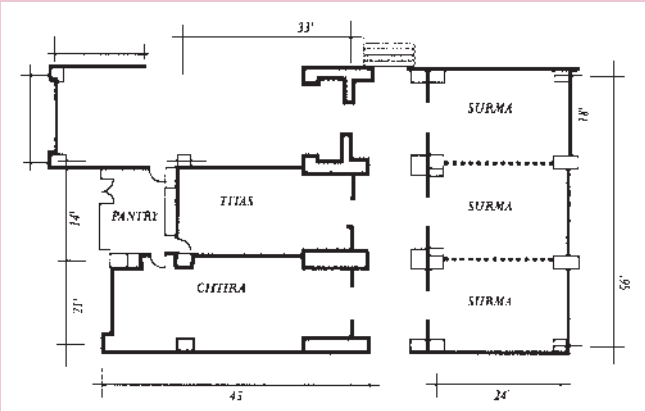
Prof. Dr. Nazrina Khatun | Prof. Dr. Rakib Uddin Ahmed
Dr. Jahan Afroza Khanam Lucky | Dr. Mohammad Rafiqul Islam

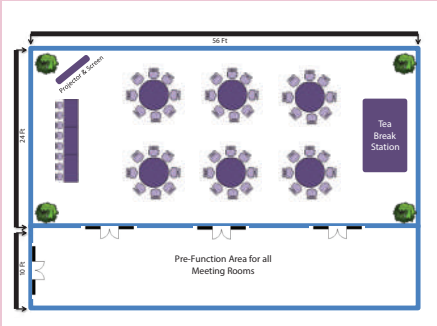
Chairperson	Moderator
Dr. Hasan Murshed	**Dr. Ishtiaq Ur Rahim**

Grand Ballroom Layout



ROOM LAYOUT





ABSTRACTS

DR. NICHOLAS ZDENKOWSKI
BMed, FRACP, PhD
Medical Oncologist, Hunter Valley Oncology
Newcastle Australia
Conjoint Senior Lecturer
University of Newcastle, Australia

Update on systemic therapy for early stage estrogen receptor positive, HER2-negative breast cancer

Progress has been made recently in the management of estrogen-receptor positive, HER2-negative early stage breast cancer. This is reflected in reductions in recurrence and death from breast cancer. Decisions about treatment have become more complex. The emergence of data to support adjuvant CDK 4/6 inhibitors is being incorporated into routine practice. It has become more clear which patients will benefit from adjuvant chemotherapy, although the tools that we use remain imprecise and may not be accessible to all. Adjuvant zoledronic acid is a relatively low-cost strategy that is supported by data, but the implementation is variable. Duration of, and type of optimal endocrine therapy according to tumour and patient variables, will be presented. Clinical trials and the early data for neoadjuvant therapy with and without immunotherapy will also be discussed.

DR. SEE HUI TI
Senior Consultant
Medical Oncologist
Parkway Cancer Centre
Singapore

Management of Non Metastatic Her 2 Over-expressed Breast Cancer

With the advent of breast cancer screening we are picking up earlier cancers and increasing the chance of cure for patients with aggressive breast cancer. Dr See shall be sharing a summary of treatment options for patients with non metastatic Her2 over expressed breast cancer and illustrating it with a few case studies.

PROF. DR. PAUL MAINWARING
MBBS, MD, FRACP
Co-Founder Executive Chairman & CEO
XING Group Holdings Pty Ltd
Brisbane, QLD Australia
Consultant, Medical Oncologist
ICON Cancer Care

Treatment of metastatic breast cancer; The case for precision medicine

The hope after the sequencing of the human genome was that by defining disease in terms of its molecular make up novel therapeutics could be developed to treat, prevent and screen for diseases. Cancer is the leading paradigm of this approach with over 100 anti-cancer agents approved by the FDA, but not all of which are cost-effective. Arguably breast cancer was the first disease that was targeted by alterations in its molecular make up (ER biology), initially by adrenalectomy, but in the 1970s by tamoxifen, 1980s aromatase inhibitors and more recently the CDK 4/6 inhibitors, which are now being used in the curative setting.

In the metastatic breast cancer (MBC) setting, it can be strongly argued that all cancers should undergo molecular screening for breast specific aberrations such as ESR1 mutations, PIK3CA/PTEN/AKT aberrations, somatic and germline aberrations in the homologous recombination deficiency genes, e.g. BRCA1/2, as well as the updated implications of protein HER2, ER, PgR and PD-L1 expression.

As metastatic disease progresses, further clonal heterogeneity is also important for second line and beyond therapies as MBC will acquire one or more of these common aberrations, as well as currently undruggable targets such as TP53 for which numerous clinical trials are underway as well as finally rare agnostic targets, MSI, HER2mu, NTRK which are also druggable. Naturally, each of these different pathways starts from the initial molecular sub type and hence we now have algorithms for first second and third line therapies for each of these.

I will share some of the challenges of building the infrastructure from a laboratory, hardware as well as software point of view in order to deliver ISO15189 accredited molecular pathology reports bringing first world medicine rapidly and at an affordable cost to Bangladeshi breast cancer patients in 2025

PROF. DR. IAN KUNKLER
Consultant
Clinical Oncology
Edinburgh Cancer Centre
University of Edinburgh,
Edinburgh, Scotland, UK

Update on adjuvant radiotherapy for early breast cancer

De-escalation is one of the themes of contemporary adjuvant radiotherapy (RT) for early breast cancer.Omission of postoperative RT after mastectomy in 'intermediate -risk' breast cancer and after breast conserving surgery (BCS) among 'low risk' older patients have long been controversial. The CALBG 9343 and PRIME II trials have provided an evidence base for the option of omission of RT in older, ER positive patients treated with BCS and adjuvant endocrine therapy (AET), influencing international guidelines. The EUROPA trial is comparing adjuvant RT alone to AET alone in older, small, ER +. HER2 negative tumours after BCS.There is also interest in the testing of molecular markers to predict which 'low risk,' ER positive, HER 2 negative older patients are likely to benefit from adjuvant RT after BCS and AET. There are a number of candidate molecular signatures of breast cancer radiosensitivity of which POLAR (Profile for Omission of Adjuvant Radiotherapy) is a leading candidate. Additional validation will be required before clinical implementation can be considered.

Indications for postmastectomy radiotherapy (PMRT) have been strongly influenced by the landmark RCTs from the Danish and Canadian trial groups demonstrating a 9-10% 10 year survival benefit of loco-regional PMRT in 'high risk ' premenopausal and postmenopausal patients treated by mastectomy and adjuvant systemic therapy and reported in the late 1990s. The 2014 EBCTCG meta-analysis showed that PMRT reduced first recurrence with a modest improvement in 15 year survival. However the landscape of breast cancer management has changed substantially over the last three decades with better screening, surgery, radiotherapy and systemic therapy associated with falling breast cancer mortality. At the same time RT dose fractionation regimes have been shortening. The BIG 2.-04 MRC SUPREMO trial evaluating the role of chest wall irradiation after mastectomy and modern systemic therapy on 10 year overall survival in 'intermediate-risk' operable breast cancer with 1-3 positive axillary nodes or node negative with other risk factors recently reported it smain results at the 2024 San Antonio Breast Cancer Symposium. Its findings may influence surgical and radiotherapeutic guidelines and practice.

DR. DODUL MONDAL
Director & Clinical Administrator
Department of Radiation Oncology
Max Super Speciality Hospital
Saket, Delhi, India

Plan evaluation in early breast cancer in the era of hypofractionated radiation

Breast cancer is the commonest cancer among women worldwide leading to significant disease burden. With progress in treatment, the outcome has improved and the issue of QOL has become more significant. In countries and centers with resource constraints, a hypofractionated regime provides better access to cancer care. Target and OAR dose vary significantly between a conventional, hypofractionated and extremely hypofractionated regime. Thus, it becomes very important to understand how to evaluate a plan in such a scenario.

Before understanding plan evaluation, it is important to understand concept of target coverage and OAR doses. Various types of plan evaluation include qualitative and quantitative plan evaluation. Several indices used to describe target coverage include conformity index (CI), Homogeneity Index (HI), Target Coverage Index (TCI) etc. Dose volume histogram (DVH) analysis is an important aspect of plan evaluation and radiation oncologists should be well aware of various types of DVH analysis methods.

It is also worth noting that various trials and protocols have used different criteria to analyze DVH. Evry center and user will require to decide and establish a particular protocol to be followed to make the entire workflow smooth and streamlined. This will improve patient safety and QOL.

PROF. DR.
S. M. KHODEZA NAHAR BEGUM
Consultant
Pathology
Bangladesh Specialized Hospital

Standard practice in pathological evaluation of RCB in breast specimen

The use of neoadjuvant therapy in managing early-stage invasive breast cancer is on the rise. There is a need to standardize the evaluation of post-neoadjuvant therapy breast specimens in routine clinical practice. Tools such as Residual Cancer Burden (RCB) utilize pathological characteristics of treated tumors to assess long-term outcomes. Neoadjuvant chemotherapy requires a thorough understanding of the specimen, along with knowledge of the patient's clinical disease, radiologic findings, and treatment course. Effective communication between specialists is crucial in optimizing patient care.

Reconstructing the gross, radiologic, and histopathologic findings is essential for estimating the Residual Cancer Burden (RCB). As pathologists, our role is critically important to our clinical colleagues and, most importantly, to the patients they treat. Therefore, our aim is to provide the most structured and valuable information possible.

This discussion aims to emphasize the importance of a unified approach to standardizing the grossing and reporting of breast specimens in the neoadjuvant setting, ultimately improving patient outcomes.

MR. ZUBIN RUSSY MASTER
Sr. Principal Radiation Physicist
National Cancer Centre
Singapore

Advances in Breast Cancer Radiotherapy: 3D, photon Arc and Proton Therapy at NCCS

This talk will provide an overview on the current standard of care for breast radiotherapy at NCCS, briefly covering 3D Conformal RT and Volumetric Modulated Arc Therapy, and will highlight the key planning techniques and considerations for these approaches. We will then transition to discussing the rationale for adopting proton radiotherapy in the management of breast cancer, and in particular, emphasize how the dosimetric properties of protons can improve target coverage, achieve improved cardiac and lung sparing, reduce contralateral breast exposure and reduce risks of secondary malignancies — especially in complex clinical scenarios, and we will briefly discuss our journey to start a proton breast trial and get proton therapy approved for the treatment of breast cancers in NCCS.

PROF. RAJESH BALAKRISHNAN
MD, DNB
(Radiation Oncology)
Professor and Head of Unit III
Department of Radiation Oncology
Christian Medical College
Vellore, India

Radiation Escalation and De-escalation Strategies in Breast Cancer in 2024

Radiation therapy is a critical component of breast cancer treatment, often used in conjunction with surgery and systemic therapies. The strategies for radiation therapy are continuously evolving, with a focus on optimizing outcomes by either escalating or de-escalating treatment based on individual patient risk factors and disease characteristics. This document explores the current approaches to radiation therapy in breast cancer, emphasizing the concepts of escalation and de-escalation. Understanding Adjuvant Radiotherapy Adjuvant radiotherapy is administered after surgery to eliminate any residual cancer cells, reducing the risk of local recurrence and improving overall survival. The Early Breast Cancer Trialists' Collaborative Group (EBCTCG) has provided substantial evidence supporting the use of adjuvant radiotherapy. Studies have shown that radiotherapy significantly reduces local recurrence rates and can lead to modest improvements in overall survival, particularly for higher-risk patients. The survival benefit is dependent on the molecular subtype of breast cancer. For example, patients with Luminal A subtype tend to have better survival rates compared to those with triple-negative breast cancer. Radiotherapy Protocols in Breast Cancer Radiotherapy is a key component of treatment for early breast cancer (EBC) and locally advanced breast cancer (LABC), with distinct protocols: • EBC – Upfront Surgery: Patients undergoing breast-conserving surgery (BCS) require whole-breast irradiation, while post-mastectomy radiotherapy (PMRT) is indicated in those with high-risk features, such as four or more positive nodes, gross residual disease, or positive margins. • EBC – Post-Neoadjuvant Chemotherapy (NACT): Patients with ER-negative and HER2-positive disease typically receive radiotherapy to the chest wall and supraclavicular lymph nodes, with individualized axillary and internal mammary chain (IMC) treatment. • LABC – Post-NACT: Post-mastectomy radiotherapy is standard for all patients, while select T1/T2N0 cases may be spared RT following multidisciplinary team discussions. • Nodal Irradiation: Nodal RT is considered for patients with T3/T4 tumors, positive nodes, or residual nodal disease post-NACT.

PROF. DR. MD ZAKER ULLAH
Consultant
Oncoplastic Breast & General Surgeon
The Harley Street Clinic
The Holly Private Hospital
Barts Health NHS Trust

De-escalating breast and Axillary surgery after neoadjuvant chemotherapy

PROF. DR. JABED IQBAL
Associate Professor
Senior Consultant
Department of Anatomical Pathology
Singapore General Hospital

Personalized Medicine - Pathology

PROF. DR. GRACE KUSUMAWIDJAJA
Professor
Consultant
Radiation Oncology
National Cancer Centre, Singapore

Hypofraction for Breast Radiotherapy

DR. PETER SCHIMD
FRCP, MD, PhD
Professor of Cancer Medicine
Royal college of Physicians
Centre lead, Group leader

Pembrolizumab for Early Triple-Negative Breast Cancer

DR. MA JUN
Consultant
Division of Medical Oncology
National Cancer Centre
Singapore

YoWo - the young woman's programme

DR. TAN SI YING
Consultant Surgical Oncologist
in the Department of Breast Surgery
in both Singapore General
Hospital and National Cancer Centre,
Singapore

Young Women with Breast Cancer and special considerations

MEDICAL PHYSICS

Radiotherapy for Breast Cancer: A Medical Physicist's Perspective on Precision, Safety, and Quality

MD AKHTARUZZAMAN, MARTIN EBERT

Introduction: **Radiotherapy remains a fundamental component in the multidisciplinary management of breast cancer, offering a balance between tumor control and minimizing toxicity to healthy tissues. This paper explores the advancements in radiotherapy techniques, emphasizing precision, safety, and quality from a medical physicist's perspective.**

Methods: This review is based on a comprehensive analysis of recent clinical trials, peer-reviewed articles, and technological advancements in the field of breast cancer radiotherapy. The primary sources include databases such as PubMed, Scopus, and clinical trial registries. Key inclusion criteria were studies published in the last decade, focusing on the precision, safety, and quality of radiotherapy techniques for breast cancer.

Results: Hypofractionated radiotherapy demonstrates comparable or superior efficacy to conventional fractionation, reducing treatment duration and patient burden. Partial breast irradiation is effective for select early-stage patients, offering local control with reduced toxicity. Stereotactic Body Radiotherapy (SBRT) shows promise in oligometastatic disease, enabling precise targeting of metastases while sparing healthy tissue. Biomarkers of radioresistance are paving the way for personalized radiotherapy, enhancing therapeutic outcomes through tailored strategies.

Conclusions: Advancements in breast cancer radiotherapy, including hypofractionation, partial breast irradiation, and SBRT, have improved precision, safety, and patient outcomes. Personalized approaches, guided by biomarkers, represent the future of radiotherapy. Sustained progress requires rigorous quality management and continuous education to optimize care delivery.

AI Driven Auto Contouring and Planning for Breast Cancer Radiotherapy: A Feasibility Study on Geometric and Dosimetric Accuracy

MD. ANWARUL ISLAM, S M HASIBUL HOQUE, MD. ESHTIAQUL HAQUE, ASIM KUMAR PAUL, MD. ABDUS SABUR

Purpose: The integration of artificial intelligence (AI)-based autocontouring and autoplanning into the radiotherapy (RT) workflow requires review and modification by a radiation oncologist before treatment planning. This process aims to enhance dosimetric accuracy while reducing interobserver variability and contouring time. This study evaluates the performance of a commercial AI-based autocontouring and autoplanning system in RT, assessing both geometric accuracy and the influence of human-reviewed AI-generated contours on optimized dose distribution and treatment plan quality.

Methods and Materials: A commercial AI-based autocontouring (Auto Contour, v2.5) and autoplanning (EZFluence v2.4.4) system from RAD formation were applied to a retrospective dataset of 20 patients treated with breast cancer radiotherapy. Human-generated contours were compared against AI-assisted human-reviewed contours using geometric evaluation metrics, including the Dice Similarity Coefficient (DSC), Hausdorff Distance (HD), and Relative Volume Difference (RVD). Dosimetric analyses were conducted using parameters such as mean dose (Dmean), near-maximum dose (D0.03cc), and normalized plan quality metrics to assess dose distribution differences between treatment plans generated from AI-assisted contours and those based on manual delineation. Additionally, the reduction in contouring and planning time achieved through automated tools was evaluated.

Results: In breast cancer cases, the agreement between AI-generated and manually contoured structures exhibited substantial variability. The spinal cord and thyroid demonstrated the highest differences, with a Dice similarity coefficient (DSC) of <0.5 and a 61% volume difference, while the contralateral breast showed a 20% volume difference. Dosimetric differences between AI-assisted and manually contoured plans were not statistically significant for most organs at risk (OARs); however, the greatest variation in dose metrics (Dmax, Dmean, and D0.03cc) was observed for the contralateral breast. Minor dose differences were noted for the heart and spinal cord. The average deviation in plan quality metrics for breast cancer cases was 0.7%. Implementation of AI-assisted contouring and planning resulted in a 65% and 73 % reduction in contouring and planning time respectively.

Conclusion: The integration of an autocontouring and autoplanning system with human review significantly decreases the time required for the radiotherapy (RT) workflow while maintaining dose distribution accuracy and plan quality.

Experience of Hybrid Planning Technique in Breast Cancer Radiotherapy

ABU KAUSAR, MORSHEDA ALAM, ABDUL MAZED, M SHARIFUL ISLAM

Radiotherapy for left-sided breast cancer poses unique challenges due to the proximity of critical organs at risk (OARs), such as the heart and lungs. Achieving precise dose distribution is essential to minimize toxicity while ensuring adequate tumor coverage. This study aims to evaluate dosimetric tradeoffs, dose weighting, and the feasibility of hybrid volumetric-modulated arc therapy (H-VMAT) in combination with conventional 3D conformal radiotherapy (3DCRT) for left-sided breast cancer.

A cohort of 10 left-sided breast cancer patients who underwent adjuvant radiotherapy was analyzed. For each patient, three distinct radiotherapy plans—3DCRT, VMAT-alone, and H-VMAT—were generated. The H-VMAT plans included varying dose weightings: 80% 3DCRT/20% VMAT, 70% 3DCRT/30% VMAT, 60% 3DCRT/40% VMAT, and 50% 3DCRT/50% VMAT. These plans were compared based on planning target volume (PTV) dose coverage, conformity, homogeneity, and dosimetric parameters for OARs. Key metrics analyzed included the mean heart dose, ipsilateral lung mean dose, V4Gy, V10Gy, and V20Gy, as well as the mean dose to the contralateral lung and breast. Treatment delivery times for all plans were also assessed.

All H-VMAT plans demonstrated PTV dose coverage, dose conformity, and homogeneity compared to 3DCRT and VMAT-alone plans. Optimal H-VMAT weighting achieved a balanced tradeoff between target coverage and OAR sparing in heart and lung doses compared to field-in-field 3DCRT or VMAT-alone approaches. Additionally, H-VMAT achieved favorable treatment efficiency without compromising critical organ sparing.

In conclusion, hybrid VMAT planning for left-sided breast cancer radiotherapy offers significant advantages in dosimetric outcomes and critical organ protection. The combination of clinical effectiveness, treatment efficiency, and ease of implementation supports H-VMAT as a practical and optimal solution for managing left-sided breast cancer.

Development of a Cost-Effective Homemade Device as an Alternative to MRI Breast Coils for Breast Cancer Detection

MD. MOKHLESUR RAHMAN

Introduction: Breast cancer is a leading cause of mortality among women worldwide, necessitating early detection for effective management. However, MRI breast coils, essential for high-quality breast imaging, are expensive and often inaccessible, particularly in low-resource settings. This study explores the development of a cost-effective homemade device using readily available materials as an alternative to standard MRI breast coils without compromising image quality.

Methods: A foam-based device was designed to adapt conventional MRI coils, such as chest or pelvic coils, for breast imaging. The foam was shaped to securely position the breast and optimize coil placement, ensuring uniform magnetic resonance coverage. Imaging parameters were carefully adjusted to replicate the quality achieved with specialized MRI breast coils. Experimental imaging trials were conducted on phantom models to validate the approach.

Results: The results demonstrated that the modified device enabled high-quality breast MRI imaging comparable to that obtained using dedicated MRI breast coils. Image clarity, resolution, and diagnostic accuracy were maintained, meeting clinical standards. The use of widely available chest or pelvic coils with the foam-based adaptation significantly reduced costs while improving accessibility.

Conclusion: This study highlights the feasibility of a cost-effective and practical solution for breast cancer detection in resource-limited settings. By utilizing a foam-based device to adapt standard MRI coils, this approach achieves imaging quality equivalent to specialized MRI breast coils, bridging the gap in access to advanced diagnostic tools. Further clinical validation and deployment could enhance early breast cancer detection and improve patient outcomes globally.

Simultaneous Integrated Boost vs. Sequential Boost in Breast Cancer Radiotherapy: A Comprehensive Analysis of Dosimetric, Radiobiological, Cost-Effectiveness

MD. JOBAIRUL ISLAM, SADIA AFRIN SARAH1 MD. ARIFUR RAHMAN1, QAMRUZZAMAN CHOWDHURY, MD. ABDUL MANNAN, AHAMMAD AL MAMUN

Purpose: This study compares two radiotherapy techniques for breast cancer—Simultaneous Integrated Boost (SIB) and Sequential Boost (SeqB)—by comprehensively evaluating dosimetric performance, radiobiological efficacy, and cost-effectiveness. By comparing dosimetric quality, radiobiological outcomes, and cost-effectiveness, this analysis aims to inform modern radiotherapy protocols optimizing both efficacy and resource utilization.

Methods: Fifteen (15) early-stage breast cancer patients underwent paired planning with SIB and SeqB. The SIB regimen delivered 48 Gy to the tumor bed and 40 Gy to the whole breast in 15 fractions (3.2 Gy/fraction boost), while SeqB comprised 40 Gy to the whole breast in 15 fractions followed by a sequential 10 Gy boost over 5 fractions. Dosimetric endpoints included PTV V95%, conformity index (CI), maximum dose, Heart D5, Heart Mean Dose, Lung V20Gy, and monitor units (MU). Radiobiological assessment utilized biologically effective dose (BED) calculations with α/β ratios of 4 tumor) and 3 (organs-at-risk), enabling tumor control probability (TCP) and normal tissue complication probability (NTCP) estimations for heart and lung. Cost-effectiveness incorporated direct costs (machine time, staffing) and indirect savings (reduced fractions). Statistical analysis employed paired t-tests (significance: $p<0.05$).

Results: Both techniques achieved excellent target coverage (PTV V95%: 98.97±0.97% [SIB] vs. 99.33±0.86% [SeqB], p=0.09) and conformity (CI: 1.128±0.05 vs. 1.1275±0.09, p=0.995). SIB demonstrated superior high-dose control, with a 2.8 Gy reduction in maximum dose (105.46±1.71 Gy vs. 108.27±1.12 Gy, p=0.0045), potentially mitigating late toxicity risks. Lung sparing favored SIB, with significantly lower V20Gy (15.2%±1.3% vs. 17.0%±1.5%, p=0.03), translating to a clinically meaningful NTCP reduction (5.8% vs. 6.9%, p=0.05). Cardiac metrics (Heart D5: 8.05±1.68 Gy vs. 8.52±2.01 Gy, p=0.425; Mean Dose: 3.67±0.8 Gy vs. 3.78±0.9 Gy, p=0.15) were comparable. Radiobiologically, SIB's higher tumor BED (86.4 Gy vs. 81.7 Gy, p=0.003) enhanced TCP (93.2% vs. 89.6%, p=0.01), suggesting improved local control. Economically, SIB reduced MU by 45% (890.22±57.33 vs. 1387.11±146.2, $p<0.0001$), shortening delivery time and lowering costs despite a marginally higher per-fraction expense.

Conclusion: SIB offers significant dosimetric and radiobiological advantages over SeqB, with lower maximum doses, enhanced lung sparing, and improved tumor control probability—all while maintaining comparable cardiac safety and offering cost benefits. These findings support the potential of SIB as a more efficient and effective strategy for breast cancer radiotherapy, warranting further investigation in larger, long-term studies.

Effect of Bolus in Post-Mastectomy Chest-Wall Irradiation: A Retrospective Cross-sectional Study

MAHMUDA AKTER, MD. FAJLE RABBY, RUBEL AHMED MD. MOTIUR RAHMAN, MUHAMMAD ADNAN ARIFEEN, A.Z.M. SUMSUZOHA, AKM AHSAN HABIB

The use of a bolus in post-mastectomy chest-wall irradiation (PMCI) is essential for ensuring adequate radiation dose delivery to the chest wall, particularly in patients with high-risk factors such as skin involvement or positive surgical margins. However, its application can also lead to increased skin toxicity, necessitating a careful balance between tumor control and normal tissue sparing. This study evaluates the dosimetric impact of bolus use in PMCI by comparing treatment plans with and without bolus, focusing on dose distribution, surface dose enhancement, and effects on nearby critical structures.

This study was conducted in TMSS Cancer Center, Bogura, Bangladesh, including 30 patients, with invasive ductal carcinoma of breast treated with conventional radiotherapy protocol during the last year. 15 patients were treated with first 12 days daily bolus and 15 with alternate days bolus. Daily bolus significantly increased the risk of severe radiation dermatitis, but alternate-day bolus showed a nonsignificant increase for severe radiation dermatitis. The patients were treated with 3DCRT by a linear accelerator and appropriate photon energy.

Key parameters such as target coverage, dose homogeneity, and exposure to organs at risk—including the lungs and heart—are analyzed. The results indicate that while bolus improves tumor bed coverage by increasing surface dose, its routine use may require optimization to reduce unnecessary toxicity. These findings emphasize the need for a patient-specific approach to bolus application, aiming to maximize therapeutic benefits while minimizing adverse effects.

Keywords: Post-Mastectomy Chest-wall Irradiation, Bolus, Surface Dose, Dosimetric Impact, Radiation Therapy Planning.

POSTER

Dosimetric Comparison of Bolus and Non-Bolus Techniques in Post-Mastectomy Breast Radiotherapy

MD. MOKHLESUR RAHMAN, MD. JOBAIRUL ISLAM, SIRAJUM MUNIRA

Introduction: Breast cancer is the leading cause of cancer-related mortality in women globally, with a significant burden in Asia. Post-mastectomy radiotherapy (PMRT) is vital for reducing locoregional recurrence (LR) and improving survival in breast cancer patients. The use of a bolus in PMRT to enhance surface dose is debated due to potential increased skin toxicity. This study aims to compare the dosimetric outcomes of bolus and non-bolus techniques, focusing on skin dose, target coverage,and dose homogeneity.

Methods: Five early-stage breast carcinoma patients (stages I-II) underwent PMRT with both bolus and non-bolus techniques. CT Simulation was done using breast board where prescribed dose of 40 Gy in 15 fractions. All treatment plans were created using IMRT and VMAT techniques with the Eclipse Treatment Planning System with Anisotropic Analytical Algorithm (AAA). Dosimetric parameters, including D99%, V95%, Max dose, Mean dose, Conformity Index (CI), and Homogeneity Index (HI), were evaluated for the planning target volume (PTV) and Organ at risk (OAR) doses, including the heart, ipsilateral lung, contralateral lung, and contralateral breast, were analyzed to compare the impact of each technique.

Results: Both bolus and non-bolus techniques provided adequate PTV coverage, with D99% values of 98.17% and 97.14%, respectively, and similar V95% values, indicating no significant compromise in target volume coverage with the non-bolus approach. The non-bolus technique showed slightly better conformity (mean CI: 1.18) compared to the bolus technique (mean CI: 1.25). However, the non-bolus technique favored reduced skin toxicity while achieving adequate dose homogeneity.

Conclusion: While both bolus and non-bolus techniques in PMRT achieved sufficient PTV coverage, the non-bolus approach may offer advantages in terms of reduced skin toxicity without significantly compromising target volume coverage. Bolus may be indicated in cases with high risk of locoregional recurrence in the skin but may not be necessary for all patients.

Male Breast Cancer: An Unfolding Challenge in Recurrence and Treatment Gaps

DR PURNOPAMA PUJA, PROF. DR. ASHIM KUMAR GHOSH

Hospital Introduction: Male breast cancer is a rare malignancy, accounting for less than 1% of all breast cancer cases. Due to its rarity, clinical management is often extrapolated from female breast cancer treatment protocols. However, male breast cancer can exhibit an aggressive course, with a high risk of recurrence and distant metastases. Limited access to treatment and financial constraints further complicate patient outcomes, particularly in resource-limited settings. This case report highlights the prolonged, recurrent, and metastatic course of male breast cancer in a 45-year-old patient, emphasizing the challenges of treatment discontinuation, the role of multimodal therapy, and the impact of financial limitations on long-term survival.

Methods: Case presentation: A 45-year-old male presented with a right breast lump 15 years ago and was diagnosed with Invasive Ductal Carcinoma. After the diagnosis, he underwent a modified radical mastectomy, followed by six cycles of adjuvant chemotherapy with 5-fluorouracil (5FU), Adriamycin, and Cyclophosphamide. Hormonal therapy was initiated and continued for 5years but due to financial constraints, the patient did not receive the recommended radiotherapy and discontinued follow-up. Seven years later, he developed a recurrent right axillary lump, which was confirmed as metastatic recurrence. He was started on second-line chemotherapy with six cycles of Docetaxel and Carboplatin. However, he discontinued treatment and follow up again after completing chemotherapy due to financial issues. One year later, he presented with another recurrence in the same breast(right side). This time, he received third-line chemotherapy with Cyclophosphamide, Methotrexate, and 5FU, followed by external beam radiotherapy (EBRT) of 30Gy in 15 fractions. Three years after the last recurrence, he developed bilateral lung metastases. Fourth-line chemotherapy with six cycles of Docetaxel and Cyclophosphamide was administered. Following completion of this therapy, when he was on follow up, he developed bone metastases, prompting a fifth-line chemotherapy with six cycles of Gemcitabine and Carboplatin, alongside eight cycles of Zoledronic acid for bone metastasis management. The patient remained on regular follow-up, receiving palliative care interventions for bone pain and respiratory distress. Despite continued medical support, he eventually developed acute respiratory distress. He declined further treatment at this stage and succumbed to the disease shortly thereafter.

Results: N/A Conclusion: Conclusion: This case illustrates the aggressive nature of recurrent male breast cancer and the impact of treatment discontinuation on long-term outcomes. The lack of financial resources resulted in gaps in treatment, which may have contributed to multiple recurrences and metastatic progression. The case emphasizes the need for structured financial support systems for cancer patients to ensure adherence to complete treatment protocols. Additionally, it highlights the importance of multimodal therapy, including surgery, chemotherapy, radiotherapy, and palliative interventions, in improving patient survival and quality of life. Further research is needed to optimize management strategies for male breast cancer, particularly.

In Silico investigation on the inhibitory activity of compounds found in Manuka Honey against MCF-7 cancer cell line and design of potential lead compounds by pharmacophore modeling

KAZI MASRUKH RAHMAN SHIRSAW, EMPIAT JAHAN HAZARI EFTI, SUMAIYA AKTER, LUTFUL HAQUE SARAN, MST. ROZINA PARUL

Introduction: Manuka honey, derived from Leptospermum scoparium, is valued for its rich chemical composition, particularly its polyphenols, flavonoids, glyoxal, and methylglyoxal, which contribute to its antimicrobial, antioxidant, and anti-proliferative properties. In recent studies, Manuka honey (MH) demonstrates significant antitumor activity in preclinical models, particularly by inhibiting the proliferation of MCF-7 breast cancer cells in a dose-dependent manner, comparable to tamoxifen and selective toxicity sparing normal mammary epithelial cells. MH induces apoptosis in CF-7 cells via PARP activation and modulates key molecular pathways by activating AMPK while inhibiting AKT/mTOR and STAT3 signaling, suggesting potential anti-inflammatory and tumor-suppressive mechanisms. Several recent in vivo studies further support MH's efficacy, as it significantly reduces MCF-7 tumor growth in nude mice, highlighting the need for further research into its therapeutic potential and molecular mechanisms. In this study, a thorough computational investigation has been done on the effects of Manuka honey components against the MCF-7 cells related to the pathophysiology of breast cancer, and some promising lead compounds has been designed by using pharmacophore modeling.

Methods: In silico investigation of the components of Manuka honey along with the standard drug Tamoxifen against MCF7 cells, i.e., ERα, PARP, AMPK, S6, and STAT3, includes the molecular docking of the components in PyRx, alignment of the components containing the best docking scores in PyMOL, pharmacophore modeling by the Pharmit web server, and searching of similar molecules based on pharmacophore in the ZINC database of purchasable molecule. Screening of the molecules in the ZINC database has been done by testing drug likeliness in the RPBS Mobyle web server. Pharmacokinetic and toxicological screening of the molecules have been done on the ADMET Lab 2.0 web server. Finally, the promising molecule has been docked again in PyRx against the aforementioned protein for final screening.

Results: About 28 different molecules extracted from Manuka Honey has been identified from several literatures, and their structures have been collected from Pubchem web server. Protein molecules have been collected from RCSB PDB (PDB ID for ERα: 1A52, S6:1RIS, PARP: 1UK0, p-STAT3:6NJS, and AMPK: 7MYJ). Docking results have shown that, several molecules have shown better binding affinity while dockined against RIS (-6 to -6.4), 1UK0 (-7.3 to -7.5), 6NJS (-7.5 to -8.5) and 7MYJ (-8.3 to 9 than the standard drug Temoxifen (-5.4,-7.0,-6.9 -7.2) on the other hand, compounds of MH have shown lightly lower (-7.2 to -8.5) binding affinity than Tamoxifen while docked against 1A52 (-9.2). Based on the docking scores, the top 3 molecules have been aligned in PyMOL and brought to Pharmit web server for pharmacophore modeling. Using the pharmacophore model, the ZINC database of purchasable molecules has been searched, and 44 molecules have been screened. All the 44 molecules were checked in RPBS Mobyle server for drug likeliness properties like Lipinski's rule of 5, human, intestinal absorption, and several other properties. However, 7 molecules have passed the drug likeliness properties, and further, they were subjected to checking ADMET properties in ADMET Lab 2.0 web server, where all the molecules have been termed accepted by the server. All the 7 molecules have re-docked against those 5 protein molecules, and all molecules have shown better results in all the proteins except 1A52 than the Manuka honey molecules, and the binding affinity of top docked compounds is as follows: 1UK0 (-11.9), 6NJS (-8.7), 7MYJ (-10.4), 1RIS (-7.1), 1A52 (-8.3).

Conclusion: Manuka honey molecules have shown antitumor activity in recent in vitro and in vivo studies, supporting the in silico findings of this research. A pharmacophore model was designed, identifying seven promising lead compounds. Further in vitro and in vivo studies are needed to develop these leads into potential anti-breast cancer drugs.

Weekly Versus Three Weekly Administration of Paclitaxel as Neoadjuvant Chemotherapy in HER2- negative, Stage III Breast Cancer: A comparison of treatment response

SHOUROV BISWAS, MD. MASUDUR RAHMAN, SARWAR ALAM, MOSTAFA SANAUL HAQUE, MOHAMMAD JAHAN SHAMS, EKRAM BIN FARUQUE, SOMA BANERJEE

Introduction: Neoadjuvant chemotherapy with doxorubicin and cyclophosphamide followed by taxane (AC followed by T) is one of the standard regimens in locoregionally advanced breast cancer. Paclitaxel, a taxane, can be given either in a three weekly or a weekly schedule. Aim of this study was to compare the efficacy in terms of clinical and pathological response of three weekly paclitaxel with weekly paclitaxel in the treatment of HER2-negative, stage III breast cancer.

Methods: A Quasi-experimental study was conducted from April 2022 to October 2023 in two centers of Dhaka, Bangladesh. Sixty-six stage-III breast cancer patients were enrolled and divided equally into two arms. Arm-A patients received four cycles of AC followed by paclitaxel (175 mg/m2) three-weekly for four cycles. Patients in arm-B received four cycles AC followed by paclitaxel (80mg/m2) weekly for 12 weeks. Patients were evaluated before, during and after the completion of the chemotherapy to assess clinical outcomes and was assessed for pathological response after surgical management.

Results: Pathological complete response (pCR) was achieved in 15 (25%) patients. Four patients (13.33%) in arm A and 11 patients (36.66%) in arm B had pCR. The difference was statistically significant (p 0.037). In both arms, patients with triple negative receptor status had increased pCR (22.22% or 2 patients out of 9 in arm A, and 85.71% or 6 patients out of 7 in arm B) in comparison to hormone receptor (ER and/or PR) positive tumors (9.52% or 2 patients out of 21 in arm A, and 21.74% or 5 patients out of 23 in arm B). But these differences were not significant.

Conclusion: After three-weekly administrations of four cycles of AC, the weekly administration of paclitaxel was found to have better pathological complete response rate in comparison to three-weekly administration of paclitaxel.

Immunotherapy for breast cancer : a review of present and future perspectives

DR. LABANNYA DAS PUJA

Methods: It is a literature review that was extracted on articles and datas from clinicaltrials.gov, pubmed and google scholar on February 2025 in english language.

Results: In tripple negative breast cancer, combination of immunotherapy based on PD1/ PD-L1 immune check point inhibitors with chemotherapy was successful. Trials combining conventional therapy as well as other modalities like bispecific antibodies, CAR-T cells, cancer vaccines and oncolytic viruses in all breast cancer subtypes are also being investigated. Excellent result seen in absence of chemotherapy in patients with high tumor infiltrating lymphocytes and early stage triple negative breast cancer has led to neo adjuvant immunotherapy trials omitting chemotherapy.

Conclusion: The number of clinical trials have been increasing in all breast cancer subtypes. Future trials are in need to answer the question of de-escalating strategies for long term benefit.

Determinants of Triple-Negative Breast Cancer: The Influence of Age and Contraceptive Use in Bangladesh.

DR. SURA JUKRUP MOMTAHENA

Introduction: Breast cancer is the most common malignancy among women and the second leading cause of cancer-related deaths worldwide TNBC is characterized by the absence of estrogen receptors (ER), progesterone receptors (PR), and human epidermal growth factor receptor 2 (HER2). This lack of receptors makes TNBC resistant to targeted hormonal therapies and HER2-targeted treatments, which are commonly used for other types of breast cancer. As a result, TNBC is often associated with a poorer prognosis and limited treatment options, The epidemiology of TNBC varies significantly across populations, with age, reproductive factors, and contraceptive use playing critical roles in its development. This study aims to evaluate the influence of age, age at marriage, parity, and contraceptive methods on the incidence of TNBC in Bangladesh.

Methods: A cross-sectional study was conducted involving 66 female patients diagnosed with TNBC, selected from the oncology outpatient department of Ahsania Mission Cancer & General Hospital. Data were collected by convenience sampling technique through face-to-face interviews using a semi-structured questionnaire.

Results: The study population comprised 66 women diagnosed with TNBC, with the largest proportion (34.8%) falling within the 31-40 age range, Mean age is 44.9 years. A significant majority of participants were married (77.01%), Muslim (95.5%), and homemakers (87.9%). Educational levels varied, with 37.9% having completed primary education and only 7.6% achieving higher secondary education or above. The mean age at marriage was 17.6 years, with 83.1% marrying before the age of 20.Regarding contraceptive use, 63.6% of patients reported using hormonal contraceptives, with oral contraceptive pills (OCPs) being the most common method. Of these, 42.8% used OCPs for more than 10 years, while 35.7% used them for less than 5 years. The mean duration of OCP use was 7.9 years. The earliest age of first full-term pregnancy was 14 years, and the latest was 32 years, with a mean age of 19.7 years. All participants were parous; 34% had 1-2 children, 43.9% had 3-4 children, and 21% had more than 5 children.

Conclusion: This study highlights the significant influence of age, age at marriage, parity, and contraceptive use on the incidence of TNBC in Bangladesh. These factors should inform public health strategies for early detection and prevention. Further research is essential to understand these risk factors better and develop targeted interventions for at-risk women.

Effects of ABCB1 gene polymorphism on toxicity of Taxene-based Chemotherapy in Bangladeshi Triple Negative Breast Cancer patients.

MD. SIDDIQUL ISLAM, JUBAYER HOSEN, KRISHNO DUTTA, FERDIN EHSAN, ZANNATUL TUNJUM ISLAM, UMME ROKAYA KEYA, MD. SHIHAD AL SHARIAR, SAJED AHAMED RIFAT, TANVIR MAMUN RUMY, HRISHIK IQBAL, WAHEED AKTER, ABU SYED MD. MOSADDE

Introduction: Triple-negative breast cancer (TNBC) poses a significant therapeutic challenge due to its aggressive nature and limited treatment options. Taxane-based drug response and toxicity may be influenced by variations of ABCB1 gene. The objective of this study was to assess the impact of ABCB1 (rs1045642) polymorphisms on the toxicity of taxane-based chemotherapy in Bangladeshi triple-negative breast cancer patients. Methods: 100 female patients with operable breast cancer who had received docetaxel or paclitaxel containing neoadjuvant chemotherapy were included in this study. The taxane- induced toxicity during the treatment was evaluated according to the Common Terminology Criteria for Adverse Events (CTCAE) version 4. DNA was isolated from patients' blood and amplified by PCR. Genetic polymorphisms were detected with the PCR-RFLP technique.

Results: It was found that patients with the "TT" genotype of the ABCB1 (rs1045642) gene had a significantly higher risk of developing Anemia (OR = 4.40, 95% CI = 1.06 to 18.09, p = 0.0400) compared to those with the CC genotype. Additionally, patients with the TT and CT plus TT genotypes of the ABCB1 (rs1045642) gene had a significantly higher risk of developing Neutropenia and Gastrointestinal Toxicity compared to those with the CC genotype (OR = 4.38, 95% CI = 0.99 to 19.35, p = 0.0511 and OR = 3.76, 95% CI = 0.95 to 14.87, p = 0.0581 and OR = 4.33, 95% CI = 1.02 to 18.25,p = 0.0457; OR = 3.63, 95% CI = 1.05 to 12.55, p = 0.0416). However, our study did not find any significant relationship between leukopenia and the ABCB1 (rs1045642) gene variant.

Conclusion: Genetic variations in ABCB1 (rs1045642) may influence the toxicity of taxane- based chemotherapy in Bangladeshi TNBC patients. This study sheds light on pharmacogenomics markers for personalized Triple-negative breast cancer treatment, optimizing efficacy and minimizing adverse effects.

Key Words: ABCB1, polymorphism, chemotherapy, taxane, triple negative breast cancer

Assessment and comparison of prevalence of breast cancer risk factors and associated awareness in women living in urban and rural settings in Bangladesh

RASHIKA T., MALLICK R H, LANIA S A C, ALAMGIR H M.

Introduction: Breast cancer remains one of the most common cancer types in females all across the globe (Houghton & Hankinson, 2021). The risk factors for breast cancer include a combination of genetic, environmental, and lifestyle factors (Falkenberry & Legare, 2002). Especially, different lifestyle and health behaviors of urban and rural females might affect their susceptibility to breast cancer (Fei et al., 2015) Urban areas, with their higher health awareness, better healthcare access, and lifestyle factors like diet, physical activity patterns and contraceptive choices may have different breast cancer risk profiles in comparison to rural settings. Understanding and assessing these differences is critical for effective prevention strategies and healthcare interventions. Therefore, this study aims to investigate and compare the prevalence of breast cancer risk factors among women living in urban and rural settings. By comparing these factors, this research seeks to highlight the need for tailored health education and policy development that can address the need for better healthcare in women in both settings.

Methods: This cross-sectional study aimed to assess and compare the prevalence of breast cancer risk factors and awareness among females from urban and rural areas. A random sample of females from both populations was selected for participation. Data were collected through two primary methods: an online survey via Google Forms for urban participants and direct field visits to rural areas for face-to-face interviews. The survey and interviews included questions regarding both modifiable and non-modifiable risk factors ; and associated awareness was also assessed. The responses were analyzed to evaluate and compare the prevalence of these risk factors between the urban and rural groups as well as the level of awareness in these populations.

Results: In terms of the prevalence of risk factors, women living in urban areas are more likely to have a higher BMI compared to women living in rural areas, although the difference is not striking. This can be attributed to another finding related to physical exercise, where rural women seem to be more physically active than their urban counterparts. Most importantly, the most remarkable difference between these two groups is their awareness of breast cancer risk factors. Rural women are significantly more likely to lack awareness (97.1%), whereas urban women appear to be better informed, with only 13% stating a lack of awareness. This

highlights a crucial area for improvement in raising awareness in a way that effectively reaches women living in remote areas. Additionally, 92.8% of rural women are hardly informed about self-breast examination compared to 8.7% in urban areas. Another significant finding is the knowledge-action gap regarding self-breast examination. While 91.8% of urban women know some or all steps of BSE, only 10.9% actually practice it in real life.This research has taken into account the COVID-19 pandemic by examining radiation exposure resulting from diagnostic or prognostic CT scans conducted either as a consequence of the infection or for other unrelated reasons. A significant portion (8.6%) of the research population underwent CT scans at some point in their lives.

Conclusion: This study analyzes prevalence rates of different breast cancer risk factors among women in urban and rural settings . This study can be used to form targeted breast cancer prevention and awareness programs ensuring that women from all environments have proper access to the information and healthcare necessary to reduce their risk of breast cancer. Further studies can be continued to evaluate these factors using a broader sample size and longitudinal data for more comprehensive insights.

Inflammatory Breast Cancer: Challenges in the Management

LT COL (DR) NASIR UDDIN

Introduction: Inflammatory Breast Cancer (IBC) is a rare and highly aggressive form of breast cancer characterized by rapid onset, inflammatory changes in the breast, and a poor prognosis. Its management requires a multidisciplinary approach due to its aggressive nature and diagnostic challenges.

Methods: This prospective study included patients who presented with Inflammatory Breast Cancer at different hospital of Bangladesh. Results: The study revealed that IBC continues to pose significant diagnostic challenges, often leading to delayed treatment initiation. Among the studies, a total of N=39 patients were managed within the past two years, and the prognosis remained unfavorable. Physical examinations consistently identified signs of inflammation, with skin changes in 54% of cases and palpable masses in 85%. Hormone receptor status revealed 23% of patients with triple- negative breast cancer (TNBC), while 31% were HER2 positive. Molecular classification showed that 31% belonged to the Luminal type-A category, and 31% were HER2 positive.

Conclusion: Inflammatory Breast Cancer management underscores the critical need for early detection and a multidisciplinary approach. The aggressive nature of IBC, coupled with diagnostic uncertainties, highlights the importance of a high clinical suspicion. To improve patient outcomes, timely and comprehensive management by a multidisciplinary team is imperative. This study highlights the complexity of IBC and underscores the importance of early intervention and holistic patient care despite the challenges faced.

The effect of the XRCC1 gene polymorphism (rs25487) on the etiology of breast cancer in the Bangladeshi population.

JUBAYER HOSEN, MD. SHIHAD AL SHARIAR, LAMIA AKTHER, MAHMUD HASAN RIFAT, TANJUM AKTER KEYA, TANVIR MAMUN RUMY, SUBROTA SUTRADHAR, FERDOWSI AKTER, ISRAT JAHAN BULBUL, YESMIN BEGUM, ABU SYED MD. MOSADDEK, KAZI ASHRAFUL ISLAM, MD. SIDDIQUL ISLAM

Introduction: In Bangladesh as well as other countries, breast cancer is the most prevalent cancer among women. DNA repair processes are essential for preserving genomic stability, and genetic predispositions are a major factor in its genesis. In the base excision repair (BER) pathway, which fixes single-strand DNA breaks, the X-ray repair cross-complementing group 1 (XRCC1) gene is an essential component. Carcinogenesis may be aided by polymorphisms in the XRCC1 gene, which might result in a diminished ability to repair DNA. XRCC1 polymorphism, especially polymorphisms like Arg399Gln, Arg194Trp, and Arg280His, have been linked in the past to a number of malignancies. Nevertheless, in spite of the increasing frequency and distinct genetic composition of the Bangladeshi population, the contribution of XRCC1 polymorphism to the etiology of breast cancer in this group is still poorly understood. Understanding these associations can help reveal how breast cancer develops and guide personalized treatment approaches. This study aims to investigate the prevalence of XRCC1(rs25487) gene polymorphism in Bangladeshi breast cancer patients and evaluate their association with cancer risk, prognosis, and tumor characteristics.

Methods: In the beginning of this project, Samples was collected from different organizations treating breast cancer. Then genomic DNA was isolated from blood samples of 400 breast cancer patients and 400 healthy controls by Isolation kit. By designing and collecting appropiate primers, Polymerase chain reaction (PCR) method used to amplify the targeted region of the XRCC1 gene. The PCR products were subjected to restriction enzyme digestion using NciI restriction enzyme, followed by Polymerase Chain Reaction-Restriction Fragment Length Polymorphism (PCR-RFLP) analysis to detect single nucleotide polymorphisms (SNPs). The digested fragments were analyzed on an agarose gel electrophoresis to identify genotypic variations. This method allowed for the efficient identification of XRCC1 polymorphisms associated with breast cancer in the studied population.

Results: The result showed significant effect of XRCC1 gene polymorphism with breast cancer susceptibility. The G allele was more frequent in the breast cancer affected population (Case 546) than the healthy population (Control 496) with the odd ratio of 1.32 and the P value was 0.0088. Patients carrying GG genotype had the highest susceptibility to this disease (Odd ratio 1.68 and P value 0.0084) while patients carrying AG genotype had also the increased risk but less susceptible than GG genotype (Odd ratio 1.64 and P value 0.0185). When both genotypes (AG & GG) were combined, association still remained significant (Odd ratio 1.66 and P value 0.0063) that indicates a potential link between this polymorphism and breast cancer.

Conclusion: The results indicate that the XRCC1(rs25487) polymorphism, specifically the G allele, may contribute to breast cancer susceptibility. Individuals with the AG and GG genotypes are at a much greater risk than those with the AA genotype. These findings emphasize the potential of XRCC1 as a genetic marker for assessing breast cancer risk.

ORAL ABSTRACTS

Port-A-Cath : A Real Life Study in Patients Receiving Chemotherapy – Single Centre Experience, to Access Efficacy, Safety & Impact on Quality of Life

FAISAL SM, RAHMAN MA, CHOWDHURY QZ, BEGUM FA, SHIDDIKA A

Introduction: Chemotherapy through Peripheral Venous Access (PVA) causes redness, swelling around the puncture site with multiple punctures, Pain or burning sensation at the injection site, streaking redness along the vein, phlebitis & extravasation. anwhile Port-A-Cath (PAC) provides significant benefits for cancer patients by offering easy, repeated access, minimizing discomfort & greater mobility while undergoing chemotherapy treatments. There is very little data in the world accessing experience of PAC in patients receiving chemotherapy & it is The First study in Bangladesh addressing this group. The purpose of this study is to assess the experience of patients with PAC who have h/o receiving chemotherapy with PVA, to evaluate any access related anxiety, pain or any complication related to venous access, to see the satisfaction, any restricted mobilities of daily living of patients receiving chemotherapy with PAC systems .

Methods: From 2019 to 2023, about 170 port cases were surveyed, where some patients died and others were not intrigued; on the other hand, a part of the population didn't experience chemotherapy through PVA. Finally, 54 port cases were chosen for this mixed cohort study on hospitals that had past experience with chemotherapy through PVA for their illness interaction at Bangladesh Specialized Hospital. Visual Analogue Scale (VAS) was utilized to get to pain and Modified Facial Anxiety Scale (M-FAS) to get to uneasiness. Experience during PVA and PAC was observed in the same patient population.

Results: Among 54 patients, M:F ratio 1 : 1.7, average age 39 yrs. Average cycle with PVA 4.23 ranging from 1-30 cycles, average duration of sticking to PVA was 2.5 months, average pain during access procedure with PVA 4 (ranges 2-6), Around 64% patient showed moderate anxiety. About complication during PVA process, one patient had extravasation, 33 patients had difficulty to access PVA due to phlebitis & 3-4 pricks per procedure & were dissatisfied with PVA, that is 64% had complication during PVA while 36% patient (21 patient) had to insert PAC for their continuous chemo purpose after several cycle & were satisfied with PVA. After inserting Port, Average cycle with PAC is 12 (ranges 3-30), average duration of PAC was 23 months (ranges from 3 months to 4 yrs), average Pain related to PAC process was 1.4 (ranges 1-6). About anxiety during PAC , 80% patient showed mild to no anxiety & 20% (11 patients) showed moderate anxiety during PAC process. Around 09% (05) patient showed complication during PAC- 3 had severe port site infection & port had to be removed, 1 had port catheter kinking & fixation was done, 1 had to reposited port for port site infection – all 5 patients inserted PAC in between chemotherapy. About psychological aspect, 92% patient were satisfied with PAC while only 36% with PVA. Considering mobility, 100% case had wide range of mobility during PAC procedure, while it was restricted for few hours during PVA procedure.

Conclusion: Port-A-Cath is a safe & effective option by avoiding chemotherapy related local complication with easy access & subjective comfort, especially for patients receiving chemotherapy, thus helps improving quality of life with access related less pain & anxiety with good patient compliance. With cost consideration port-a-cath can be advised with individual needs.

Clinico-Demographic Characteristics of CA 15-3 Biomarker Positive Recurrent Breast Carcinoma Patients

RAWNOK JAHAN KABIR, REFOYEZ MAHMUD, MD. ENAMUL KABIR, ABDULLAH MD ABU AYUB ANSARY, SALMA SULTANA

Introduction: Chemotherapy through Peripheral Venous Access (PVA) causes redness, swelling around the puncture site with multiple punctures, Pain or burning sensation at the injection site, streaking redness along the vein, phlebitis & extravasation. anwhile Port-A-Cath (PAC) provides significant benefits for cancer patients by offering easy, repeated access, minimizing discomfort & greater mobility while undergoing chemotherapy treatments. There is very little data in the world accessing experience of PAC in patients receiving chemotherapy & it is The First study in Bangladesh addressing this group. The purpose of this study is to assess the experience of patients with PAC who have h/o receiving chemotherapy with PVA, to evaluate any access related anxiety, pain or any complication related to venous access, to see the satisfaction, any restricted mobilities of daily living of patients receiving chemotherapy with PAC systems .

Methods: From 2019 to 2023, about 170 port cases were surveyed, where some patients died and others were not intrigued; on the other hand, a part of the population didn't experience chemotherapy through PVA. Finally, 54 port cases were chosen for this mixed cohort study on hospitals that had past experience with chemotherapy through PVA for their illness interaction at Bangladesh Specialized Hospital. Visual Analogue Scale (VAS) was utilized to get to pain and Modified Facial Anxiety Scale (M-FAS) to get to uneasiness. Experience during PVA and PAC was observed in the same patient population.

Results: Among 54 patients, M:F ratio 1 : 1.7, average age 39 yrs. Average cycle with PVA 4.23 ranging from 1-30 cycles, average duration of sticking to PVA was 2.5 months, average pain during access procedure with PVA 4 (ranges 2-6), Around 64% patient showed moderate anxiety. About complication during PVA process, one patient had extravasation, 33 patients had difficulty to access PVA due to phlebitis & 3-4 pricks per procedure & were dissatisfied with PVA, that is 64% had complication during PVA while 36% patient (21 patient) had to insert PAC for their continuous chemo purpose after several cycle & were satisfied with PVA. After inserting Port, Average cycle with PAC is 12 (ranges 3-30), average duration of PAC was 23 months (ranges from 3 months to 4 yrs), average Pain related to PAC process was 1.4 (ranges 1-6). About anxiety during PAC , 80% patient showed mild to no anxiety & 20% (11 patients) showed moderate anxiety during PAC process. Around 09% (05) patient showed complication during PAC- 3 had severe port site infection & port had to be removed, 1 had port catheter kinking & fixation was done, 1 had to reposited port for port site infection – all 5 patients inserted PAC in between chemotherapy. About psychological aspect, 92% patient were satisfied with PAC while only 36% with PVA. Considering mobility, 100% case had wide range of mobility during PAC procedure, while it was restricted for few hours during PVA procedure.

Conclusion: Port-A-Cath is a safe & effective option by avoiding chemotherapy related local complication with easy access & subjective comfort, especially for patients receiving chemotherapy, thus helps improving quality of life with access related less pain & anxiety with good patient compliance. With cost consideration port-a-cath can be advised with individual needs.

Evaluating the Success of Current Standard of Care in Breast Cancer Treatment: A Retrospective Study in Bangladesh

MD ARIFUR RAHMAN, QAMRUZZAMAN CHOWDHURY, FERODUS ARA BEGUM, AYASHA SHIDDIKA, MD NURUNNABI (RONEY), SHARMIN AKHTER RUPA, MASHUD PERVEZ, S. M. KHODEZA NAHAR BEGUM, SALMA SULTANA

Introduction: Breast cancer remains a leading cause of morbidity and mortality among women globally, with significant disparities in outcomes between high-income and low- and middle-income countries (LMICs). In Bangladesh, late-stage diagnoses and limited access to targeted therapies contribute to poor survival rates. This study aims to evaluate the effectiveness of the current standard-of-care breast cancer treatment in Bangladesh, with a particular focus on luminal subtypes, disease progression, and survival outcomes.

Methods: This retrospective observational study was conducted at Bangladesh Specialized Hospital, analyzing the medical records of 1,088 breast cancer patients. Data on patient demographics, tumor characteristics, treatment protocols, and survival outcomes were extracted. Kaplan-Meier survival analysis and the Cox proportional hazards model were employed to assess progression-free survival (PFS) and overall survival (OS) across luminal subtypes.

Results: Among the study population, Luminal A was the most common subtype (38.60%), followed by TNBC (22.89%) and Luminal B subtypes (19.76%). HER2-positive subtypes accounted for 11.58% of cases. Kaplan-Meier analysis revealed that Luminal A had the most favorable prognosis (68.06% survival at 365 days), whereas HER2-positive and TNBC subtypes exhibited the worst survival outcomes (17% and 22.89% survival, respectively). The Cox proportional hazards model confirmed that Luminal A had a statistically significant protective effect (HR: 0.25, 95% CI: 0.09-0.73, p=0.01), whereas HER2-positive patients had a fourfold higher risk of progression compared to Luminal A. Patients with stable disease had a median PFS of 407.5 days, while those with disease progression had a median PFS of only 75.0 days. Treatment patterns revealed that radiation therapy (50.55%) and chemotherapy (40.44%) were the most commonly administered modalities, while lumpectomy was performed in 38.97% of patients.

Conclusion: This study highlights significant disparities in breast cancer treatment efficacy and survival outcomes based on molecular subtypes in Bangladesh. Luminal A subtypes demonstrated the best prognosis, while HER2-positive and TNBC cases exhibited the highest progression risks. The limited availability of targeted therapies and inconsistent surgical practices may contribute to suboptimal outcomes in high-risk subtypes. Integration of molecular subtyping, expansion of targeted therapy access, and improvements in early detection programs are crucial for optimizing breast cancer care in resource-limited settings.

Hypofractionated radiotherapy for 5 week 50 gy versus 3 week 40 gy in locally advanced Breast cancer in Bangladeshi woman of breast cancer at a tertiary level hospital in angladesh.

PROFESSOR DR ROWSHAN ARA BEGUM, DR SURA JUKRUP MOMTAHENA, DR ADITI PAUL CHOWDHURY.

Hypofractionated radiation therapy (HypoRT) is a treatment schedule that divides the total dose of radiation into large doses, with treatments given once a day or less often. HypoRT has been widely adopted worldwide because it reduces the length of treatment courses, which can improve healthcare resources and patient convenience. Adjuvant radiotherapy following neoadjuvant chemotherapy and surgery is now recognized as an effective treatment for locally advanced breast cancer (LABC), particularly in patients with positive lymph nodes who undergo mastectomy and axillary clearance. This approach has been shown to significantly reduce locoregional cancer recurrence and breast cancer mortality. Traditionally, the administration of adjuvant radiotherapy for these cases has involved a schedule of 25 fractions of 2 Gy delivered over a span of 5 weeks.

Methods: This quasi-experimental study conducted from January 2021 to January 2023 at the Ahsania Mission Cancer & General Hospital, investigated 15 different fraction regimens delivering a total dose of 40 Gy over a period of 3 weeks.

Results: This study evaluates the safety of the international standard 15 fraction regimen of adjuvant radiotherapy along with the toxicity and rate of recurrence, conducted at a tertiary level hospital in Bangladesh, specifically focusing on locally advanced breast cancer (LABC). The study also indicates that 56% of the total patient had no local recurrence and the toxicity evaluation also showed no significant difference with the international guideline.

Conclusion: This study is conducted to ensure that the treatment regimen is not less effective than traditional methods for local cancer control of LABC survivors and is equally safe compared to the 25 fraction regimens for patients with locally advanced breast cancer (LABC) in Bangladesh.

Hypofractionated Radiotherapy in Post Operative Breast Cancer Patients. 03 Years Clinical Experience in a Newly Established Cancer Center

DR. SHAILA SHARMIN, YOUSUF ALI ,SM ROKONUZZAMAN, NAZAT SULTANA, ASHEQUZZAMAN, ANOWER HOSSAIN, IBRAHIM NASER, ISRTAT SULTANA,IFFAT SHARMIN

Introduction: Breast conserving surgery and post mastectomy breast irradiation has been established as a standard care for early breast cancer. RT dose of 45-50 Gy in 1.8-2 Gy per fraction & 42.5 Gy at 2.66 Gy per fraction.Tumor bed boost is recommended in patients at higher risk for local failure, age < 50 years, positive axillary nodes, LVSI, or close margins. Typical doses are 10-16 Gy at 2 Gy per fraction. All dose schedules are given 5 days per week.Post mastectomy regional radiotherapy (PMRT) is effective at preventing locoregional failure (LRF).

Methods: All patients were staged accordingly. Data collection would be in tabulated sheet. This retrospective chort study conducted in cancer center, CMH, Dhaka, Bangladesh, including patients with carcinoma of breast treated with hypofractionated radiotherapy during last 03 year . The patient treated with 3DCRT, IMRT by LINAC, 6 MV photon and appropriate electron energy.

Results: Out of 82 patients,12 had undergone BCS and 70 mastectomy. Mean age of population was 52 years. 80% were T1&T2; in BCS group whereas most patients in mastectomy group had T3&T4; (60%). 45% were node negative in BCS group . TNBC accounted for 13% and their mean age was 43 yrs. Acute skin toxicity at the end of treatment was Grade 1 in 94% of mastectomy group and 71% in BCS group. Grade 2 toxicity was 6% in mastectomy group and 23% in BCS group. Grade 3 was 6% in BCS group. No grade 3 toxicity in mastectomy patients and grade 4 skin toxicity in any case. Post RT at 1 month; 39% of BCS patients had Grade I skin reaction which was only 7% in mastectomy patients. At 3 months post RT, 18% patients had persisting hyperpigmentation. At 6 months 8% patients had persisting erythema in the BCS group only. 3% of BCS and 8% of mastectomy patients had lymph edema till the date of evaluation. Cosmetic outcome in BCS patients remained good to excellent 6 months post surgery and radiotherapy. 1 patient of BCS and 3 patients of mastectomy had developed metastatic disease at the time of evaluation. Conclusion: Hypofractionated RT is well tolerated with less acute skin toxicity and good cosmetic outcome. Regimens such as these should be encouraged in other centre to increase machine output time. The study is on-going to assess long term results

Real-Life Retrospective Single-Arm Study of Postpartum Breast Cancer: Epidemiological Insights into Uncommon and Critical Cases in Bangladesh

DR. NAHEED RUKHSANA , DR. SURIANA SULTANA

Introduction: Postpartum breast cancer (PPBC) is a largely unknown subtype of breast cancer, with few research investigating its potentially inferior prognosis. Even when age and the degree of the disease are taken into consideration, patients who receive a breast cancer diagnosis during the postpartum phase may have poorer results.

Methods: Here we have taken 20 post-partum breast cancer patients who were taking treatment from the very beginning in a single center from last 1 year.

Results: Among the 20 patients included in this study, 50% were diagnosed with triple-negative breast cancer (TNBC), 30% with estrogen receptor (ER)/progesterone receptor (PR)-positive breast cancer, 14.8% with ER/PR-negative breast cancer, and 5% with Triple Positive Breast Cancer. Moreover 10%of the patients had disease progression during their treatment. Additionally, 20% of the patients found with metastatic disease. Here we have found 50% of the patients who were misdiagnosed by FNAC which later lead to advanced stage disease progression. All participants were under 40 years of age where the median age is 32 years with the majority residing in rural areas. Along with that we have seen more aggressive state of the disease in the younger patients. The age of their youngest child was less than 2 years. Most patients were diagnosed at advanced stage of disease, contributing to the severity and complexity of their cases.

Conclusion: This preliminary investigation suggests that women diagnosed with breast cancer during the postpartum period tend to experience poorer outcomes. Specifically, the diagnosis of postpartum breast cancer (PPBC) within the first two years after childbirth is linked to an elevated risk of metastasis. It is observed in both estrogens receptor-positive and estrogen receptor-negative cases, with the risk continuing to be significant in estrogen receptor-positive instances. Overall, the findings indicate that a postpartum breast cancer diagnosis serves as negative prognostic indicator. Our main focus is to create awareness among the postpartum women (Specially lactating mothers) periodical screening is essential for early detection. Any breast lump in postpartum period must be evaluated by core biopsy. Further studies with extended follow-up and larger sample sizes are needed to validate these results.

Real-Life Retrospective Single-Arm Study of Postpartum Breast Cancer: Epidemiological Insights into Uncommon and Critical Cases in Bangladesh

DR. NAHEED RUKHSANA , DR. SURIANA SULTANA

Authors: Md. Siddiqul Islam*1, Salma Parvin2, Ferdin Ehsan1, Zannatul Tunjum Islam1, Umme Rokaya Keya1, Krishno Dutta1, Tanvir Mamun Rumy1, Jubayer Hosen1, Yesmin Begum1 Hrishik Iqbal6 Abu Syed Md. Mosaddek2, , Kazi Asharaful Islam4,Md. Waheed Aktar5, Institution: 1 Department of Pharmacy, Southeast University, Dhaka, Bangladesh 2Quest Bangladesh Biomedical Research Center, Dhaka, Bangladesh 3Department of Pharmacology, Uttara Adhunik Medical College, Dhaka, Ba Introduction: Breast cancer is one of the most common malignancies globally, with chemotherapy being a key treatment option. However, patient responses and treatment-related toxicities vary, often due to genetic factors. The MRP1 (ABCC1) and MDR1 (ABCB1) genes, which regulate drug transport and metabolism, play a significant role in this variability. MRP1 facilitates drug clearance, while MDR1 limits intracellular drug accumulation, contributing to chemotherapy resistance. Genetic polymorphisms in these genes can influence chemotherapy effectiveness and toxicity. This study explores the impact of MRP1 and MDR1 polymorphisms on treatment outcomes, aiming to identify genetic markers that could lead to more personalized and effective chemotherapy strategies for breast cancer patients.

Methods: Methods: A total of 325 patients diagnosed with invasive breast cancer were included in the study. Among them, 155 patients underwent neoadjuvant chemotherapy to assess both treatment response and toxicity, while 170 patients received adjuvant chemotherapy to evaluate toxicity alone.

Tumor response and axillary lymph node involvement were assessed using the sixth edition of the TNM staging system by the American Joint Committee on Cancer (AJCC) and the RECIST criteria. Chemotherapy-induced toxicity was graded using the Common Terminology Criteria for Adverse Events (CTCAE) v4. Genetic polymorphisms were identified using the PCR-RFLP technique.

Results: Results: The MRP1 gene variant was linked to a higher risk of chemotherapy-induced anemia in individuals carrying the TT and CT + TT genotypes (OR = 1.91, 95% CI = 1.07–3.42, p = 0.035 and OR = 1.58, 95% CI = 1.01–2.49, p = 0.040, respectively). Conversely, the MDR1 polymorphism in patients with the TT and CT + TT genotypes was found to confer protection against anemia (OR = 0.39, 95% CI = 0.21–0.73, p = 0.0045 and OR = 0.59, 95% CI = 0.38–0.94, p = 0.033, respectively), neutropenia (OR = 0.48, 95% CI = 0.24–0.95, p = 0.036 and OR = 0.61, 95% CI = 0.38–0.98, p = 0.047, respectively), and leukopenia (OR = 0.46, 95% CI = 0.22–0.96, p = 0.040 and OR = 0.55, 95% CI = 0.33–0.92, p = 0.025, respectively). Additionally, patients with the CT, TT, and CT + TT genotypes exhibited a significant protective effect against gastrointestinal toxicities (OR = 0.45, 95% CI = 0.22–0.95, p = 0.040; OR = 0.34, 95% CI = 0.12–0.95, p = 0.043; and OR = 0.41, 95% CI = 0.21–0.81, p = 0.011, respectively). Conclusion: Conclusion: The MRP1 gene variant was linked to increased chemotherapy-related toxicity, whereas the variant allele of MDR1 demonstrated a protective effect against chemotherapy-induced adverse effects.

AI Driven Auto Contouring and Planning for Breast Cancer Radiotherapy: A Feasibility Study on Geometric and Dosimetric Accuracy.

MD. ANWARUL ISLAM, S M HASIBUL HOQUE, MD. ESHTIAQUL HAQUE, ASIM KUMAR PAUL1, MD. ABDUS SABUR

Introduction: The integration of artificial intelligence (AI)-based autocontouring and autoplanning into the radiotherapy (RT) workflow requires review and modification by a radiation oncologist before treatment planning. This process aims to enhance dosimetric accuracy while reducing interobserver variability and contouring time. This study evaluates the performance of a commercial AI-based autocontouring and autoplanning system in RT, assessing both geometric accuracy and the influence of human-reviewed AI-generated contours on optimized dose distribution and treatment plan quality.

Methods: A commercial AI-based autocontouring (Auto Contour, v2.5) and autoplanning (EZFluence v2.4.4) system from RAD formation were applied to a retrospective dataset of 20 patients treated with breast cancer radiotherapy. Human-generated contours were compared against AI-assisted human-reviewed contours using geometric evaluation metrics, including the Dice Similarity Coefficient (DSC), Hausdorff Distance (HD), and Relative Volume Difference (RVD). Dosimetric analyses were conducted using parameters such as mean dose (Dmean), near-maximum dose (D0.03cc), and normalized plan quality metrics to assess dose distribution differences between treatment plans generated from AI-assisted contours and those based on manual delineation. Additionally, the reduction in contouring and planning time achieved through automated tools was evaluated.

Results: In breast cancer cases, the agreement between AI-generated and manually contoured structures exhibited substantial variability. The spinal cord and thyroid demonstrated the highest differences, with a Dice similarity coefficient (DSC) of <0.5 and a 61% volume difference, while the contralateral breast showed a 20% volume difference. Dosimetric differences between AI-assisted and manually contoured plans were not statistically significant for most organs at risk (OARs); however, the greatest variation in dose metrics (Dmax, Dmean, and D0.03cc) was observed for the contralateral breast. Minor dose differences were noted for the heart and spinal cord. The average deviation in plan quality metrics for breast cancer cases was 0.7%. Implementation of AI-assisted contouring and planning resulted in a 65% and 73 % reduction in contouring and planning time respectively.

Conclusion: The integration of an autocontouring and autoplanning system with human review significantly decreases the time required for the radiotherapy (RT) workflow while maintaining dose distribution accuracy and plan quality.

Portable ultrasound as an important peri operative tool for surgeons as tumour localization and ensuring tumour free margin during BCS or wide local excision.

LEEA AMIN, JANNATUL FERDAUSE RIFAT , RUBAMA KARIM, ADITY PAUL CHOWDHURY, SAMINA JAFAR KHALEQUE, ARIF, RABEYA KHANDAKER TRISHA

Introduction: Breast cancer is the second leading cause of cancer death in women in United states, third in UK and fifth in Asian Countries. Now a days, due to availability of different cost effective, user riendly portable ultrasound devices, a majority number of early breast cancer patients and high risk breast lesions undergo USG guided needle biopsy for diagnosis. Usually surgeons did not have access to ultrasound in the office or outpatient department or in clinic settings. For earlier detection of breast cancer and high risk lesions before they are palpable which causes a challenge for breast surgeons and require assistance from radiologists and sonologist colleague to localize breast lesions prior to excision. The commonest employed solution to this problem was pre operative needle localization which was performed by radiologists as pre operative wire localization (POWL). Wires, which serve as intra operative guidance to the lesion and typically placed by radiologists before and needs to be performed on the day of surgery to avoid wire migration due to patients movement . this results in a complex co ordination between the surgery and the radiology department and often results in operative room delays, cumbersome situation in maintaining OT schedules . There are many other innovative alternatives to POWL. They allow independent radiology and surgery scheduling and also decoupled from the surgical incision from localizing technique . but all these procedures are a little challenging for patients with low socio-economic status where health care cost is major issue in their lives. Ultrasound guided blue dyed jelly injection around the lesion just prior to surgery can be a solution to this.

Methods: A retrospective study was done through hospital information system among patients undergone breast conserving surgery with SLNB or wide local excision with axillary sampling from January 2023 to January 2025. Follow up was confirmed both in persons and over phone calls histopathologically tumour margins, number of Lymph nodes with metastasis, Lymph vascular involvements, presence of DCIS etc. were assessed.

Results: A total of 40 patients had undergone breast conserving surgery from January 2023 to January 2025 at AMCGH where ultrasound was used to define margins of the breast lesion pre-operatively by injecting blue dye mixed with lidocaine jelly. 20 patients completed one year following breast conserving surgery, 11 patients completed more than 6 months and 3 are very recent cases. Histopathologically, all showed tumour free margins a mean of 8 mm margin free of tumour. All the 40 patients were satisfied with the outcome and none choose to proceed for symmetrization of opposite breast. 6 patients presented with seroma following radiotherapy, 10 patients had skin thickening greater than 5 mm during follow up, 2 patients presented with superficial skin infection , managed by antibiotics.

Conclusion: However, even though there are many other innovative methods of tumor localization in case of breast conserving surgery all over the globe, they can't always be implemented in developing Asian countries in their usual hospital setups. Increasing familiarity with and utilization of per-operative ultrasonography and injection of blue dyed jelly to locate the tumour during breast conserving surgery and assessing its resected margin may be clinically and economically beneficial over traditional localization technique and performing an oncologically safe surgery. Further large scale study and long term follow up will be required to validate these findings.

SHORT TERM OUTCOMES OF ONCOPLASTIC BREAST SURGERY AT A TERTIARY CANCER CENTRE IN BANGLADESH

NURUZZAMAN, HASAN SHAHRIAR, MD. BHUIYAN, A K M MINHAJ UDDIN ISLAM, MD. JOHIRUL ULLAH, MD. ZAKER

Introduction: Oncoplastic breast surgery (OPS) is the preferred approach of treatment for many breast cancer pa ents withcomparable surgical, oncological and survival outcomes. OPS has a huge poten al in Bangladesh, but no study has been conducted till date to quantify the surgical, oncological, cosmetic, and quality of life (QoL) outcomes of OPS.

Methods: Methodology: This was a prospective study conducted among 48 consecutive patients with breast cancer at National Institute of Cancer Research & Hospital, Dhaka, who met the inclusion criteria for OPS from March 2021 to June 2022. Multiple socio-demographic, tumour, surgical outcome, cosmesis and QoL related data were collected and analysed using SPSS. Results: Result: Most patients had T2 and N1 disease (79.2%), with a median age of 40 years. The mean pathological tumour size was 20.38 (±11.54 mm). 15% of patients had post-operative complications. Most of them had a good to excellent cosmesis with a median score of 13. 62.5% were highly satisfied with their body image. Post-operative complication was associated with body image ($X^2 = 4.227$ (df=1); $p = 0.039$). Cosmesis had significant association with pre-operative T stage ($X^2 = 4.785$ (df=1); $p = 0.028$) and post-operative complications ($X^2=5.296$ (df=1); $p = 0.021$).

Conclusion: Conclusion: The study results suggest that OPS could be a feasible approach for Bangladeshi patients with a comparable surgical outcome, acceptable complication rate, excellent cosmesis and satisfactory quality of life, in short term, even in a resource-poor se ng. Though, further randomised, multi centre studies with larger sample sizes and comparison groups are required to validate these findings.

Effect of XRCC1 Gene Polymorphism (rs1799782) on Response and Toxicities of Chemotherapy in Bangladeshi Breast Cancer Patients

MD. SHIHAD AL SHARIAR, JUBAYER HOSEN, LAMIA AKTHER, MAHMUD HASAN RIFAT, TANJUM AKTER KEYA, TANVIR MAMUN RUMY, SUBROTA SUTRADHAR, FERDOWSI AKTER, ISRAT JAHAN BULBUL, YESMIN BEGUM, ABU SYED MD. MOSADDEK, KAZI ASHRAFUL ISLAM, MD. SIDDIQUL ISLAM

Methods: A total of 400 breast cancer cases and 400 controls were included in this study. Patients undergoing chemotherapy, including cyclophosphamide, doxorubicin, and 5-fluorouracil (CAF/CEF regimens), were genotyped for XRCC1 (rs1799782) polymorphism using the PCR-RFLP technique. Treatment responses were classified as complete response (CR), partial response (PR), stable disease (SD), or progressive disease (PD). Toxicities were assessed according to the Common Terminology Criteria for Adverse Events (CTCAE) version 4.

Results: The CC genotype was predominant among patients (89.75%), while CT and TT genotypes were found in 8% and 2.25%, respectively. Patients carrying the T allele (CT+TT genotypes) exhibited a significantly lower response rate to chemotherapy, with increased rates of stable and progressive disease. Furthermore, individuals with the T allele demonstrated a higher incidence of chemotherapy-induced toxicities, including anemia, neutropenia, leukopenia, and gastrointestinal complications ($p < 0.05$ for all comparisons). The statistical analysis indicated that the CT+TT genotypes were associated with a higher risk of chemotherapy-induced side effects, suggesting a role for XRCC1 polymorphism in influencing treatment tolerance and effectiveness.

Conclusion: XRCC1 (rs1799782) polymorphism influences chemotherapy response and toxicity in Bangladeshi breast cancer patients. The T allele is linked to reduced efficacy and increased adverse effects, highlighting the potential of XRCC1 genotyping for personalized treatment. Larger, multi-ethnic studies are needed for validation.

Scope of Advanced Breast Cancer Surgery in a Govt. Hospital - A Single Centre Experience Authors: Sharmin Islam, Sadia Afrin Tani, Mst Jesmen Nahar, Fahimul Islam Mondol, Prof. Salma Sultana

MD. SHIHAD AL SHARIAR, JUBAYER HOSEN, LAMIA AKTHER, MAHMUD HASAN RIFAT, TANJUM AKTER KEYA, TANVIR MAMUN RUMY, SUBROTA SUTRADHAR, FERDOWSI AKTER, ISRAT JAHAN BULBUL, YESMIN BEGUM, ABU SYED MD. MOSADDEK, KAZI ASHRAFUL ISLAM, MD. SIDDIQUL ISLAM

Introduction: Breast cancer is the 2nd leading cancer worldwide. Breast cancer management has been upgraded tremendously. Breast cancer surgery has been also evolved day by day. Paradigm shifted from Haisted adical Mastectomy to Patey's Modified Radical Mastectomy Breast Conserving Surgery (BCS) with Axillary Dissection (ALND) / Sentinel Lymph node Biopsy (SLNB). Treatment cost aiso increased along with the modernized management. Though Govt. Hospital has its own limitations, we are trying to provide current surgical practice to our patients.

Methods: A retrograde observational study was done in Department of Surgery, Dhaka Medical College Hospital from 01.01.2024 till date, among the Breast cancer patients who underwent BCS. Purposive sampling technique was applied. Preoperatively, MRI of Both breast was present in most of the cases other than conventional triple assessment and Staging investigations, Hydromarker was present in 3 cases, NACT given in 7 cases, Post NACT response was assessed clinically and radiologically. Peroperatively, Specimen radiograph, Frozen Section biopsy done in all cases to assess the resection margin. Postoperatively, adjuvant as well as tumour Boost Radiotherapy were ensured in all cases.

Results: Among 9 patients, BCS with level 1 oncoplasty done in 2 pts, wire guided wide local excision in 3 patients, Lateral mammoplasty in 2 patients, Grisotti technique in 1 patient, dermoglandular rotation technique in 1 patient. Among complications, seroma developed in 2 cases, SSI in 2 cases.

Conclusion: Breast Conserving Surgery provides better cosmesis along with oncological safety iftreated properly and timely completed all modalities of management in breast cancer patients. Other than patient burden, single machine for frozen section biopsy, trained staff, any sort of adjuvant radiotherapy for breast can not be provided by Govt. hospitals. So patient motivation for expensive Radiotherapy after BCS is very difficult. Our Govt. should come forward to overcome the difficulties and financial issues regarding cancer management, so that we can step forward along with other developed countries.

Comparative Study Between Imprint Cytology and Frozen Section Biopsy for Intraoperative Assessment of Sentinel Lymph Node in Breast Cancer

NOOR-E-ALAM, SALMA SULTANA, MASHUD PARVEZ, SWAPNIL ROY, MOHAMMAD ASAD ULLAH, MD. FAHIMUL ISLAM MONDAL, MOHAMMAD MASUM, MD. MEHFUJUL HASSAN, SADIA SORUVI, MIR MD. ASHRAFUL ISLAM

Methods: A prospective observational study was conducted on 95 samples from January 2024 to December 2024 at the Department of Surgery, Dhaka Medical College Hospital, and two private medical centers. Patients included were diagnosed with breast carcinoma and negative lymph nodes on preoperative assessment. Data, including demographics, history, clinical examinations, comorbidities, and investigations, were collected and analyzed using IBM SPSS Statistics version 25.

Results: The study analyzed 95 breast cancer cases. Cancer staging revealed 5.25% at Tis, 29.47% at T1, 49.47% at T2, 3.16% at T3, and 12.63% at T4. Infiltrating ductal carcinoma was the predominant histological type (88.42%), followed by ductal carcinoma in situ (5.26%), infiltrating lobular carcinoma (2.10%), and mucinous carcinoma (2.10%). Tumor grades were predominantly grade II (75.79%), followed by grade III (9.47%) and grade I (7.37%). Hormonal receptor status categorized patients as Luminal B (36.84%), Luminal A (29.47%), triple-negative (16.84%), and HER2-enriched (14.74%). Surgical interventions included wide local excision (44.21%), simple mastectomy (27.37%), simple mastectomy with axillary dissection (20.00%), and wide local excision with axillary dissection (8.42%). Diagnostic performance for axillary lymph node metastasis detection showed imprint cytology with 88.46% sensitivity and 95.59% specificity, while frozen section demonstrated 100% sensitivity and 95.59% specificity. The positive predictive value and negative predictive value for imprint cytology were 88.46% and 95.59%, respectively, compared to 90% and 100% for the frozen section.

Conclusion: Both methods demonstrated high specificity; however, imprint cytology was less sensitive than the frozen section in detecting SLN metastases. Due to its simplicity and lower cost, imprint cytology could be considered an alternative to the frozen section

Survival probabilities of breast cancer patients beyond serial axillary node dissection – A prospective study

A. K. MOSTAQUE, A. M. M. SHARIFUL ALAM, M. KAMAL

Introduction: Introduction of radiotherapy in breast cancer (BC) multimodality treatment has obscured therapeutic value of ipsilateral axillary lymph node dissection (ALND). Now occasional ALND is indicated as a part of BC therapy and axillary sampling in the form of sentinel lymph node (LN) biopsy(SLNB) counts only positive nodes is the routine procedure for pathological node (pN) staging to forecast prognosis with idea that pN staging could efficiently anticipate prognosis of BC. The objectives were to (1) determine pathological node (pN) and lymph node ratio (LNR) subgroups of patients, (2) observe distribution of recurrences and deaths of patients according to pN stages and LNR subgroups, and (3) estimate survival functions of disease free (DFS) and overall survival (OS) after death of all cases of any one subgroups observed during follow-up.

Methods: This prospective cohort study was conducted on 51 consecutively treated BC patients treated at Ahsania Mission Cancer and General Hospital, Uttara, Dhaka . All included patients underwent modified radical mastectomy in majority of cases, oncoplastic surgery, pedicelled latissimus dorsi myocutaneous flap reconstruction, and skin sparing key whole mastectomy along with serial ALND. Data collected on number of total and positive axillary LNs, pN staging, LNR subgroups, and DFS and OS of treated BC patients at defined follow-up date (December, 2022) when all cases belonged to anyone subgroup died. Follow-up should continue till a total of 75% cases are died and censored.

Results: Patient distribution between pN and LNR subgroups indicated highly significant difference in between pN3 and high-risk LNR ($p = 0.000001$). The median duration of DFS and OS were 49.23 and 52.63 months respectively. The number of recurrences, deaths, and censored were 17 (33.3%), 21 (41.2%), and 5 (9.8%) respectively. Survival functions of DFS indicated curves of pN0 subgroup had best and of pN1, pN2, and pN3 had similar but worst survival time. Pair wise comparison indicated significant difference between pN0 and pN2 ($p = 0.048$) only. The DFS of LNR subgroups indicated highly significant difference between low- and high-risk ($p = 0.000003$), and between intermediate- and high-risk ($p = 0.000115$) LNR. The curves of low- and intermediate-risk LNR of DFS were similar ($p = 0.958$) with best and of high-risk the worst survival time. The estimated mean survival of OS of pN sages indicated no significant difference. The pN0 and pN1 curves were similar with best and, pN2 and pN3 curves were similar with worst survival. Survival functions of OS of LNR subgroups indicated highly significant difference between low- and high-risk ($p = 0.000049$), and between intermediate- and high-risk ($p = 0.000014$) LNR. No significant difference was observed between low- and intermediate- risk LNR ($p = 0.641$) Survival functions estimator plots of OS indicated curves of low- and intermediate-risk were similar with best and of high-risk LNR worst survival.

Conclusion: Lymph node ratio unveil greater number of high-risk cases, powerfully forecast prognosis with high precision, and should be introduced in Tumor Node Metastasis classification providing axillary lymph node dissection should be reintroduced as routine procedure. Proposal is affix lymph node ratio to pathological node stages of Tumor Node Metastasis staging of breast cancer & should show number of +ve lymph nodes/total dissected axillary lymph nodes as superscript (e.g. pN 17/26). Counting only positive axillary lymph node is unreal to forecast prognosis. This research work discovered that introduction of ipsilateral axillary lymph node dissection simplify oncoplastic breast surgery by slashing the heavy workload of symmetrization of opposite normal breast and of plastic surgeons, minimize postoperative complications and scar tissue formation, and ensures the best possible long term aesthetic outcome of the breasts.

Novel Development in Breast Radiotherapy in Bangladesh: Challenges in Intraoperative Radiotherapy by a Breast nco-surgeon

ALI NAFISA

Methods: A systematic search of studies published before February 2021 was conducted in PubMed, Scopus, and Science Direct. Inclusion criteria targeted studies employing a single-fraction 20 Gy IORT treatment using the Xoft Axxent eBx system for EBC patients. Eligible studies were reviewed following PRISMA guidelines. Patient selection criteria, cosmetic outcomes, recurrence rates, and the need for subsequent EBRT were analyzed. These findings were compared to clinical outcomes from 20 Bulgarian patients treated with the same modality.

Results: Out of 1032 studies, 17 met the eligibility criteria. Most studies reported excellent cosmetic outcomes, with low recurrence rates ranging from 1% to 5.8%. However, up to 31% of patients required additional EBRT. In the Bulgarian cohort of 20 patients, cosmetic results were similarly rated as excellent, with 25% requiring EBRT. Over a median follow-up of 39 months, there was one case of local recurrence and one distal recurrence. No randomized controlled trials (RCTs) have been conducted to confirm this approach's long-term effectiveness.

Conclusion: The Xoft Axxent eBx system is a safe and feasible option for IORT in EBC patients, with favorable cosmetic outcomes and low recurrence rates. However, a substantial proportion of patients may still require EBRT. The absence of RCTs limits definitive conclusions regarding its long-term effectiveness.

Breast Cancer Detection with Explainable AI: Grad-CAM and Bounding Box-Based Interpretability

SAMRAT KUMAR DEV SHARMA, . MD. YUSUF HOSSAIN , RUKONOZZAMAN RUKON, MAHMUD HOSSEN, . FUTANTA CHAKMA

Introduction: Breast cancer detection using mammographic images is a crucial application of artificial intelligence (AI) in medical diagnostics. While deep learning models have demonstrated high accuracy, their lack of interpretability hinders clinical adoption. Radiologists require explainable AI (XAI) techniques to ensure AI-generated predictions align with human expertise. This study explores the integration of Grad-CAM heatmaps and bounding box visualization to enhance the transparency and reliability of AI-driven breast cancer detection.

Methods: The dataset, sourced from the RSNA Screening Mammography Breast Cancer Detection competition, includes 54,706 mammographic images in DICOM format with metadata such as laterality, view, age, density rating, and cancer diagnosis. A severe class imbalance (1,158 cancer cases vs. 53,548 non-cancer cases) was addressed using focal loss and an up-sampling factor of 10 for the cancer class. Data augmentation techniques, including random horizontal flips, brightness/contrast adjustments, hue/saturation modifications, coarse dropout, and Mix-up, were applied. ConvNeXtV1-small and EfficientNetV2 architectures were trained, with metadata integrated at the image level. Breast bounding boxes were detected using YOLOX and resized for further processing. Grad-CAM heatmaps were generated to highlight key regions influencing the model's predictions, and bounding boxes refined lesion localization. Figure 1 illustrates the proposed workflow, showing image preprocessing, model training, and XAI-based interpretability techniques.

Results: The models were evaluated using probabilistic F1 (pF1) scores to assess their effectiveness in detecting breast cancer. Key challenges, such as class imbalance and computational limitations, impacted on the overall performance. Table 1: Presents the pF1 scores achieved by the evaluated models: Model pF1 ConvNeXtV1-small 0.558 EfficientNetV2 0.331 ConvNeXtV1-small demonstrated superior performance with a pF1 score of 0.558, significantly outperforming EfficientNetV2 (0.331). The higher pF1 score suggests that ConvNeXtV1-small is better at extracting meaningful patterns from mammographic images, making it a more reliable choice for breast cancer classification. The application of Grad-CAM heatmaps and bounding boxes provided crucial insights into model predictions. Grad-CAM successfully localized diagnostic features such as masses and calcifications, aligning well with radiologists' assessments. Benign cases often exhibited highlighted dense breast tissue, whereas malignant cases consistently emphasized tumor regions and calcifications. Bounding boxes further refined lesion localization, reducing false positives and helping focus on clinically significant areas. Figure 2 shows representative Grad-CAM heatmaps with bounding boxes, highlighting areas of high model attention. These visualizations demonstrate the effectiveness of XAI techniques in enhancing model interpretability.

Conclusion: This study demonstrates that incorporating Grad-CAM and bounding boxes into AI-based mammography enhances model transparency and aligns with clinical evaluations. These techniques allow radiologists to visually validate AI-driven decisions, improving trust in automated breast cancer detection. The findings underscore the importance of explainable AI (XAI) in medical diagnostics, bridging the gap between deep learning models and radiological practice. Future work will explore Transformer-based architectures and further refinements in data augmentation to enhance model robustness and generalization.

Surgical Management of Metaplastic Breast Cancer: A Retrospective Analysis

PROF, SALMA SULTANA

heterogeneous subtype that has worse survival rates than other triple-negative breast cancers. It accounts for fewer than 1% of invasive breast cancers and is characterized by adenocarcinoma with spindle cells, squamous epithelium, and/or mesenchymal tissue differentiation. The majority of metaplastic breast cancers exhibit the characteristics of triple▪negative breast cancer and have unfavorable prognosis with a lower survival rate. Moreover, among several MpBC subtypes, the squamous subtype was related to better prognosis, and mixed metaplastic carcinomas were associated with worse recurrence▪free survival and breast cancer ▪specific survival (BCSS). Currently, the optimal treatment of metaplastic breast cancer remains uncertain.

Methods: This study is a single-institution retrospective analysis of 8 patients with MpBC, focused on response to therapies in the context of core biopsy, IHC, Clinical and Pathological staging, histopathology type, chemotherapy regimen and surgery followed by radiation therapy. All the data were obtained from patients' electronic health records.

Results: Among the MpBC patients, the median age at diagnosis was 49.5 years. 75% with triple-negative disease, 12.5% with squamous cell MpBC,50% spindle cell MpBC, and 12.5% with HER2-low disease along with one case 0f phyllode tumor. 50% received neoadjuvant therapy,25% received adjuvant chemotherapy, 75% underwent MRM breast surgery and 12.5% underwent lumpectomy, 25% received radiation therapy after surgery. Due to the aggressive nature and often larger size of MBC tumors, mastectomy rates tend to be higher than in other types of breast cancer. The majority of metaplastic breast cancers exhibit the characteristics of triple▪negative breast cancer and have unfavorable prognosis with a lower survival rate. Moreover, among several MpBC subtypes, the squamous subtype was related to better prognosis, and mixed metaplastic carcinomas were associated with worse recurrence▪free survival and breast cancer▪specific survival (BCSS).

Conclusion: The NCCN Clinical Practice Guidelines in Oncology for breast cancer do not yet prescribe treatment regimens for MpBC that differ from those for IDC (YAN et al., 2513). Furthermore, standard surgery, radiation, and chemotherapy continue to produce dismal results for MpBC. considering the identification of potential target sites and the rapid advancement of immunological and targeted therapy, molecular and immunocytochemical testing, as well as germline BRCA pathogenic variant testing of breast tumors, should be performed to determine the best treatment strategy to improve the poor prognosis of MpBC patients. In the future, additional well-designed clinical studies will be necessary to investigate effective treatment techniques in MpBC.

Multimodal AI for Breast Cancer Diagnosis: Precision Segmentation and Comprehensive Report Generation from Mammograms

ISTIAK AHMED1, KAZI SHAHRIAR SANJID1, MD. ANZIM HOSSAIN, GALIB AHMED, SHEIKH ANISUL HAQUE, MD. ARIFUR RAHMAN, NASIR M. UDDIN, AND M. MONIR UDDIN

Background: Breast cancer is a leading cause of mortality among women worldwide, with early and accurate detection being crucial for effective treatment. Mammography is the gold standard for breast cancer screening; however, interpreting mammograms is challenging due to subtle abnormalities and high inter-observer variability. Existing research often focuses on either segmentation of breast structures or classification of clinical features but rarely integrates both in a multimodal framework. Furthermore, interpretability and accessibility of AI tools in rural areas and medical camps remain underexplored. This study addresses these gaps by developing an integrated system that combines multimodal early and late fusion techniques for predicting clinical features (e.g., mass presence, mass definition, mass density, calcification type, ACR breast density, BIRADS category) and segmenting key structures (e.g., breast tissue, axilla findings, mass, calcification). The system also incorporates explainable AI (XAI) tools like GRAD-CAM and saliency maps to enhance transparency.

Material & Methods: Our methodology integrates advanced deep learning architectures and multimodal fusion strategies to address both segmentation and clinical feature prediction tasks. For segmentation, we employed a U-Net-based architecture with attention mechanisms to accurately delineate key breast structures such as breast tissue, axilla findings, masses, and calcifications. The model was trained using pixel-wise cross-entropy loss, Dice loss, Focal loss, Combined loss and optimized using metrics such as Intersection over Union (IoU), Dice Similarity Coefficient (DSC), precision, recall, F1 score, Average Surface Distance (ASD), Normalized Surface Distance (NSD), Hausdorff Distance (HD), and Relative Absolute Volume Difference (RAVD). To ensure robustness, we augmented the dataset with transformations such as rotation, flipping, and intensity adjustments.

For clinical feature prediction, we utilized a multimodal fusion approach combining image embeddings extracted from a customized Multi-Layer Perceptron (MLP) with tabular data features (e.g., patient demographics, imaging metadata). Early fusion concatenated image embeddings with tabular features before feeding them into a fully connected neural network, while late fusion independently processed each modality and combined predictions using weighted averaging. The models were evaluated using accuracy, precision, recall, F1 score, Area Under Curve (AUC), and Receiver Operating Characteristic (ROC) curves.

To enhance interpretability, we incorporated Explainable AI (XAI) tools such as Gradient-weighted Class Activation Mapping (GRAD-CAM) and saliency maps. These tools provided visual explanations for both segmentation outputs and clinical feature predictions, enabling radiologists and medical students to understand the rationale behind model decisions.

Results: The proposed system demonstrated exceptional performance across all evaluation metrics. For segmentation tasks, the model achieved high Intersection over Union (IoU) scores exceeding 0.85 and Dice Similarity Coefficient (DSC) values above 0.90 for major structures, including masses, calcifications, and breast tissue. Clinical feature prediction exhibited accuracies surpassing 90% for most categories, with strong precision, recall, and F1 scores. Explainable AI (XAI) tools like GRAD-CAM and saliency maps provided interpretable insights, validating model decisions and enhancing trust. These results underscore the system's robustness and reliability in both segmentation and classification tasks, establishing its potential as a powerful tool for breast cancer diagnostics.

Conclusions: This research bridges the gaps in breast cancer diagnostics by integrating advanced segmentation, clinical feature prediction, and explainability within a single accessible platform. By providing accurate and interpretable insights, the system empowers radiologists and medical professionals, particularly in underserved regions, to make informed decisions, thereby reducing diagnostic errors and improving patient outcomes globally. The incorporation of XAI tools ensures transparency, fostering trust and adoption among healthcare providers. Furthermore, the comprehensive approach of combining multimodal data with interactive visualization enhances diagnostic clarity. Future work will focus on expanding datasets, validating the system across diverse populations, and refining its applicability in real-world clinical workflows to maximize its impact on global healthcare.

BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2015


Bangladesh Breast Cancer Conference 2015


Bangladesh


p 0.001
38%
n=117


Bangladesh
Breast Cancer Conference 2015


of Surgeons


Organized By:


3 weeks
Yes


Breast Cancer


Society of Su

BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2017


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





CANCER
CONFERENCE





01 December 2017






Bangladesh
Breast Cancer
Conference
2017
PRE CONFERENCE
COUTOURING
WORKSHOP
Welcome to
PRE CONFERENCE
COUTOURING
WORKSHOP





Welcome to
PRE CONFERENCE
CO OURING
W KSHOP


BANGLADESH BREAST CANCER CONFERENCE

MEMORIES 2019


BREAST
CANCER
CONFERENCE
2019


BANGLADESH
BREAST
CANCER
CONFERENCE
2019
Bangladesh Society for Breast Cancer Study (BSBCS)


BANGLADESH
BREAST
CANCER
CONFERENCE


BANGLADESH
BREAST
CANCER
CONFERENCE
2019
Bangaldesh Society for Breast Cancer Study (BSBCS)


82 year old
Locally advance left breast
15 cm fungating breast cancer
Triple negative disease
40kg
Performance status of 3
Albumin level is 28
Mass is fixed to the
pectoralis muscle
There is no metast
but


Moderator:
Dr. Fo Ara Begum


BRCA gene


(AROI)


BANGLADESH
BREAST
CANCER
CONFERENCE
2019
Bangaldesh Society For Breast Cancer Study (BSBC
BREAST CANCE


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

CONTINUOUS MEDICAL EDUCATION (BREAST AND LUNG)

BREAST Cancer Awareness

9th October 2020

Prof. Dr. Nadia Harbeck

Collaborative decision making in HER2+ Neoadjuvant Breast Cancer

23rd October 2020

Dr. Maria Vidal

Adjuvant Treatment in HER2+ eBC Patient: Selecting the Standrad Option

6th November 2020

Prof. Dr. Martine J.Piccart Gebhart

Recommendations for the Identification and treatment of HER2-positive Metastatic breast cancer

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.

Dr. Akhil Chopra

Session 1

Molecular testing landscape in Lung Cancer

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

Prof. Tony Mok

Session 2

Biomarker-Driven Advanced NSCLC management focusing EGFR & ALK

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

Dr. Akhil Chopra

Session 3

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

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

Prof. Silvia Novello

Session 4

Cancer Immunotherapy: Resectable NSCLC and Novel Combinations in Lung Cancer

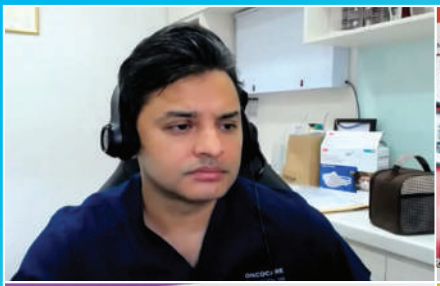
04 March 2022 | Time: 3:30 – 5:00 pm (BST)

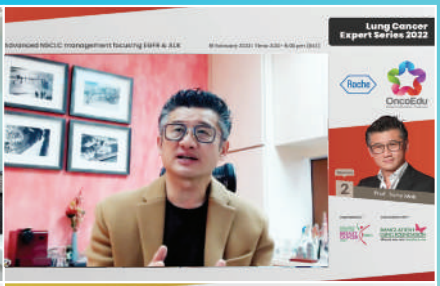
Dr. Emad Dawoud

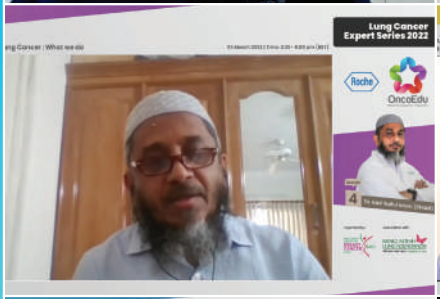
Session 5

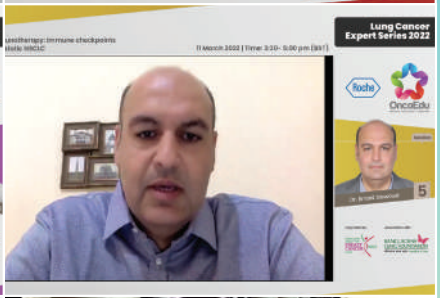
Cancer Immunotherapy: Immune checkpoints across line of metastatic NSCLC

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

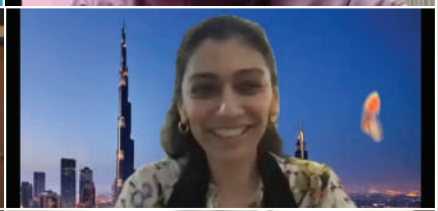


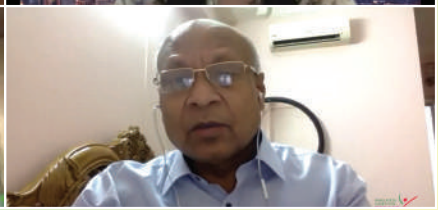

Lung Cancer
Expert Series 2022
Roche
OncoEdu


Lung Cancer
Expert Series 2022
Roche
OncoEdu


Lung Cancer
Expert Series 2022
Roche
OncoEdu

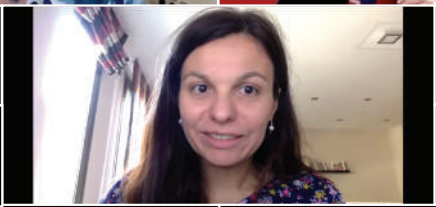

Lung Cancer
Expert Series 2022
Roche
OncoEdu





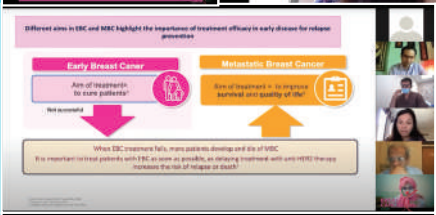

EMILIA TRIAL DESIGN

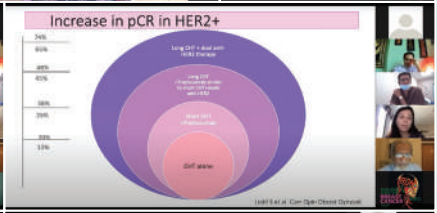

Advanced HER2+ BC: HER2 targeted agent




Optimal Management of HER2+ Advanced Breast Cancer

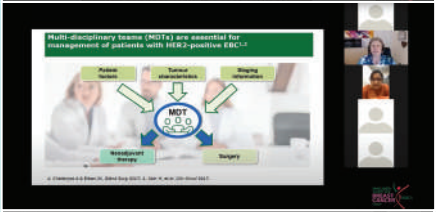

HER2 TESTING

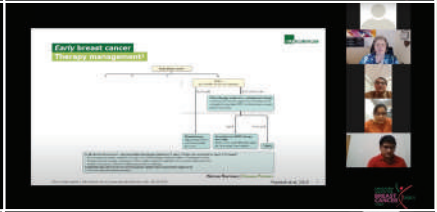

Different aims in EBC and MBC highlight the importance of treatment efficacy in early disease for relapse prevention
Early Breast Cancer
Metastatic Breast Cancer


Increase in pCR in HER2+

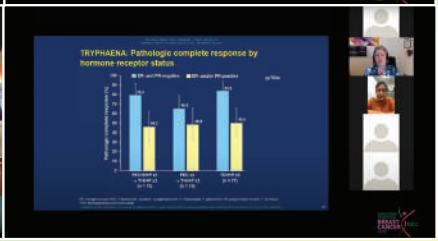

Breast Cancer Unit


Development of pCR rates following neoadjuvant chemotherapy plus anti-HER2 treatment


Multi-disciplinary teams (MDTs) are essential for management of patients with HER2-positive EBC
MDT


Early breast cancer
Therapy management


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
mjvidal@clinic.cat
Friday, October 23rd
Translational genomics and targeted therapies in solid tumors
SOLTI


TRYPHAENA: Pathologic complete response by hormone receptor status

GLOBAL CANCER INSTITUTE (GCI)

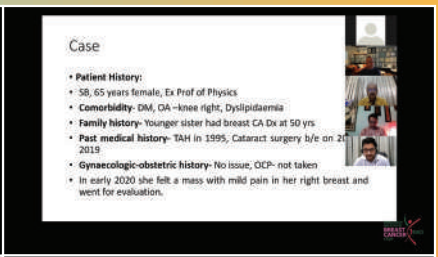
BANGLADESH SOCIETY FOR BREAST CANCER STUDY

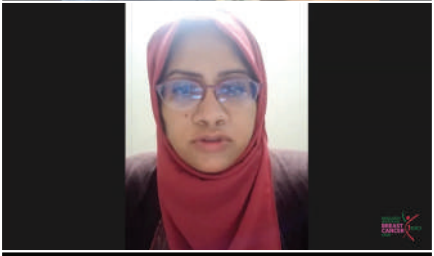
BSBCS

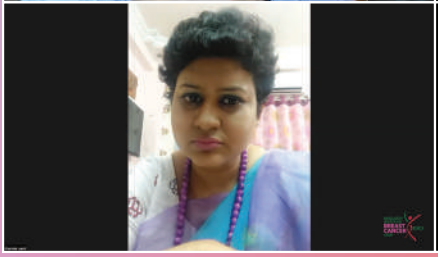
GCI
Global Cancer Institute

BANGLADESH SOCIETY FOR BREAST CANCER STUDY & GLOBAL CANCER INSTITUTE

JOINT COLLABORATION BREAST TUMOR BOARD

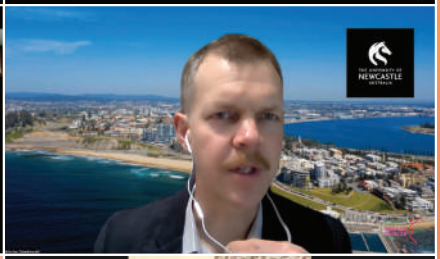

Case
• Patient History:
• 58, 65 years female, Ex Prof of Physics
• Comorbidity- DM, OA –knee right, Dyslipidaemia
• Family history- Younger sister had breast CA Dx at 50 yrs
• Past medical history- TAH in 1995, Cataract surgery b/e on 20
2019
• Gynaecologic-obstetric history- No issue, OCP- not taken
• In early 2020 she felt a mass with mild pain in her right breast and
went for evaluation.

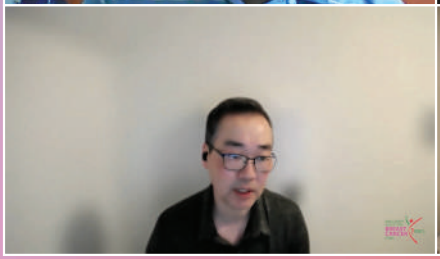





Subscribe

- Presented with right breast lump in UOQ, **4th quarter of 2018.**
- **Core biopsy:** IDCC GII.
- **Clinical staging:** T2N1.
- **Surgery:** BCS with Axillary Clearance done 4th Q of 2018.
- **HPR:** IDCC GII, T- 4x3 cm, ALN- Metastatic DCC (12/22), Margins-free
- **IHC:** ER/PR- Positive(8/8), HER2-Negative.
- **Pathological staging:** T2N3.





ANNUAL GENERAL MEETING (AGM)


BANGLADESH
SOCIETY FOR
BREAST
CANCER


1st AGM
SCIENTIFIC PROGRAM 2021


Inauguration


BEACON


BEACON


BEACON


BANGLADESH SOCIETY FOR BREAST CANCER STUDY
BSBCS


1st AGM
SCIENTI





1st AGM
SCIENTIF
2021




1st AGM
SCIENTIFIC PROG
2021

1st BREAST CANCER PRECEPTORSHIP PROGRAM

BANGLADESH SOCIETY FOR BREAST CANCER STUDY

BSBCS

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	


1st BREAST CANCER
PRECEPTORSHIP PROGRAM
BANGLADESH SOCIETY FOR BREAST CANCER
BSBCS


1st BREAST CANCER PRECEPTORSHIP PROGRAM
BANGLADESH SOCIETY FOR BREAST CANCER STUDY
BSBCS


International & National Faculties
BREAST CANCER


BREAST CANCER
STUDY
BSBCS


International & National Faculties
Dr. Shalabi P Joshi
Dr. Khandan Sakamuthal


Healthcare
Oncology

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)

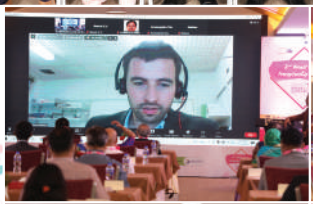
Breakfast	08:00 - 09:00 AM	
Hypofractionation in Breast Radiotherapy	09:00 - 09:40 AM	Prof. Tabassum Wadasadawala
Essentials of Breast Cancer Surgery	09:40 - 10:10 AM	Dr. Garvit Chitkara
Recent Advances in Breast Cancer Surgery	10:10 - 10:40 AM	Dr. Shalaka P Joshi
Tea Break	10:40 - 11:10 AM	
Plan Evaluation 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	

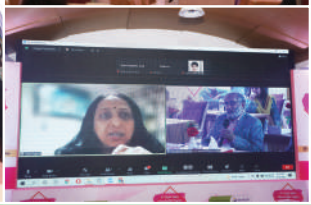
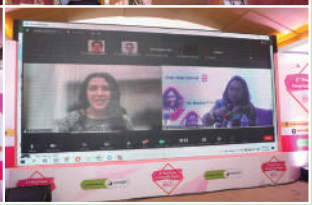





2nd Breast Cancer
Preceptorship Program

2nd Breast Cancer
Preceptorship Program




2nd Breast Cancer Preceptorship Program


2nd Breast Cancer Preceptorship Program

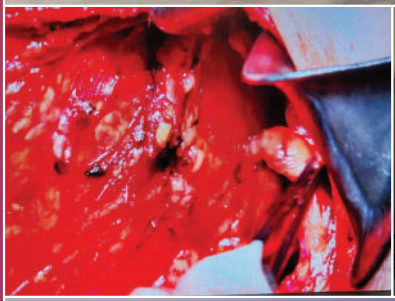

Prof. Jyoti Bajpai

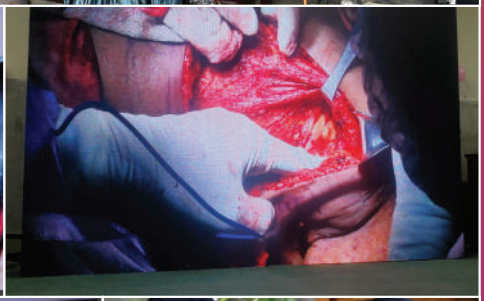
SCREENING PROGRAM


শক্তি ফাউন্ডেশন
ব্রেস্ট স্ক্রিনিং ক্যাম্পেইন
আয়োজনে: শক্তি ফাউন্ডেশন।


ব্রেস্ট স্ক্রিনিং ক্যাম্পেইন
আয়োজনে: শক্তি ফাউন্ডেশন।

BBCC 2022






BANGLADESH
BREAST
CANCER
CONFERENCE
2022


global burden.
CVD


ANGLADESH
BREAST
CANCE
20


st wall flaps


BANGLADESH BREAST CANCER
CONFERENCE 2022

CRC MANAGEMENT EVENT


CRC Management
TNT to Metastatic
CRC Management
TNT to Metastatic
CRC Management
TNT to Metastatic


CRC Management
TNT to Metastatic
CRC Management
CRC Manage


CRC Management


TNT to Metastatic
IROTECAN


TNT to Metasta
Frida
8, 2023
PM


CRC Management
TNT to Metastatic
DIVERSION
+ ILEOSTOMY (IN ALL CASES?)
+ TRANSVERSE COLOSTOMY
CRC Management
TNT to Metastatic
Welcome
Participants


What went Wrong?


C Managemen
TNT
Metasta
uly 28, 2023
:00 PM
Sonarga

3rd PRECEPTORSHIP PROGRAM ON SARCOMA

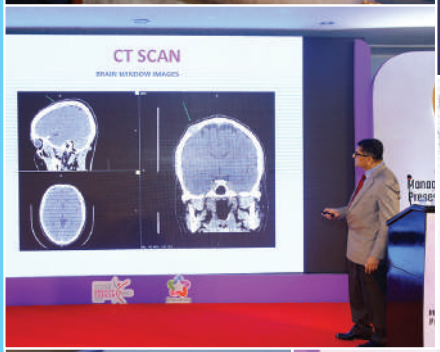

BREAST CANCER STUDY
BSBCS
OncoEdu
Presents
Preceptorship Program on


BREAST CANCER STUDY
BSBCS
Presents
Preceptorship Program on


Management of Sarcoma:
Present & Future Aspects


Presents


Presents


CT SCAN
BRAIN WINDOW IMAGES


coma: Pres Future Asp


CANCER
Presents


BANGLADESH SOCIETY FOR BREAST CANCER STUDY
BSBCS
OncoEdu
Presents

CONTRIBUTORS

Healthcare Oncology | Healthcare | BEACON® Light for life

Roche | RADIANT PHARMACEUTICALS | sanofi | synovia oncology

Incepta | Everest Pharmaceuticals Ltd. | ZAS Corporation Ltd.

BEXIMCO PHARMA | ONCOLOGY | Jenphar Bangladesh | جنفار بنغلاديش | NOVARTIS

ACI ADVANCING POSSIBILITIES | ARISTOPHARMA LTD. | MGH HEALTHCARE | AstraZeneca

ZISKA PHARMA | RENATA PLC | SK+F ONCOLOGY | Reliance Labs

EVENT PARTNERS

PLATINUM

Healthcare Oncology | Healthcare

BEACON®
Light for life

GOLD

Roche

RADIANT PHARMACEUTICALS

sanofi | synovia oncology

MGH HEALTHCARE

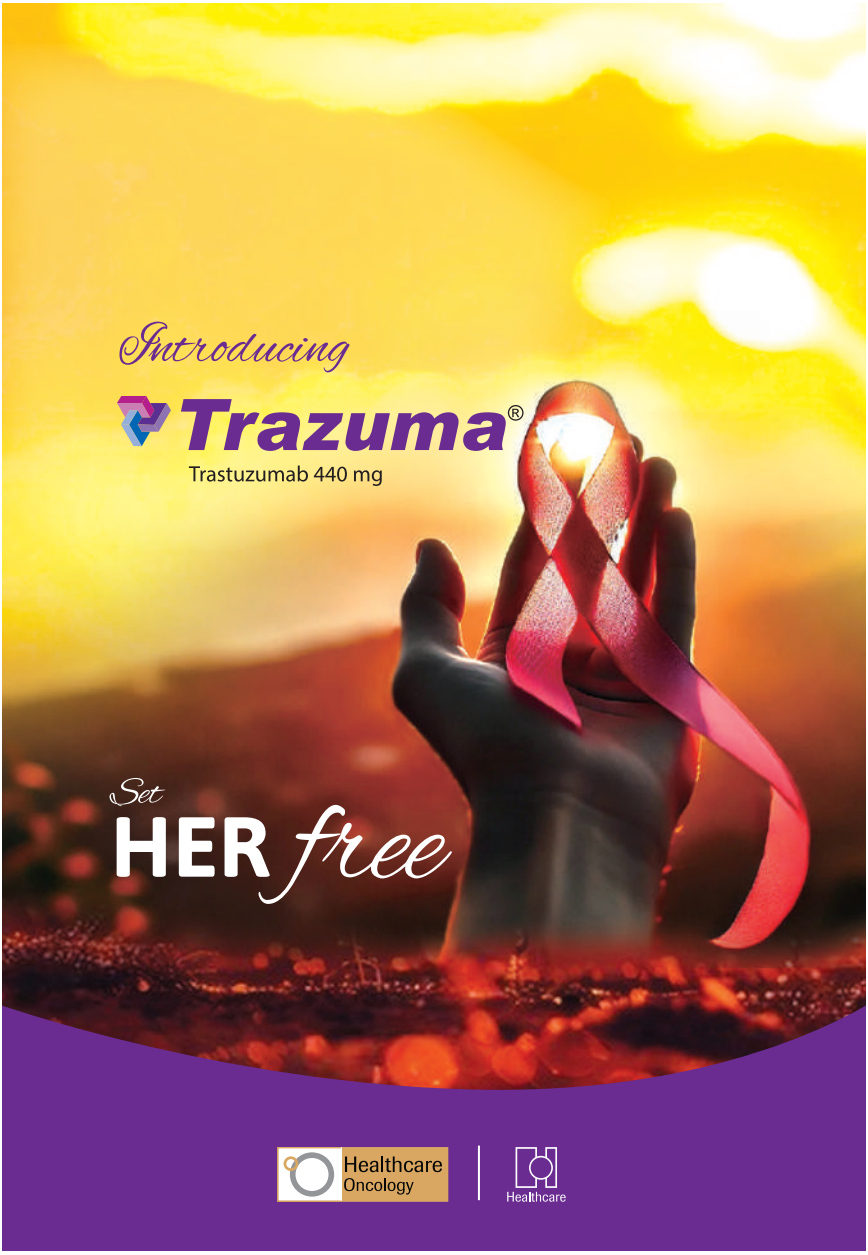
AstraZeneca

SILVER

incepta

Everest Pharmaceuticals Ltd.

ZAS Corporation Ltd.


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

Innovations of
F. Hoffmann-La Roche Ltd.

PHESGO®
PERTUZUMAB-TRASTUZUMAB

Herceptin® SC
trastuzumab

PERJETA®
pertuzumab

Kadcyla®
trastuzumab emtansine

AVASTIN®
bevacizumab

TECENTRIQ®
atezolizumab

ALECENSA®
alectinib 150 mg capsules

MabThera®
Rituximab

GAZYVA®
obinutuzumab

Roche

Roche Bangladesh Limited
Ninakabbo, 227/A, Level-11 (South), Tejgaon
Gulshan Link Road, Tejgaon I/A, Dhaka-1208, Bangladesh
Tel: +88 09612 403144, www.roche.com.bd

RADIANT PHARMACEUTICALS

Radiant Pharmaceuticals Limited
SKS Tower (Level 7 & 8), 7 VIP Road Mohakhali
Dhaka 1206, Bangladesh, Phone: +880 9835717

TAXOTERE® Docetaxel Injection I.P.

Presentation: TAXOTERE® 20mg/1ml vial (Docetaxel 20mg/ml) & TAXOTERE® 80mg/4ml vial (Docetaxel 80mg/4ml). Indications: Breast Cancer (adjuvant and metastatic) 2) Non-Small Cell Lung Cancer 3) Ovarian Cancer 4) Prostate Cancer 5) Gastric Adenocarcinoma including adenocarcinoma of the gastroesophageal junction 6) Head & neck Cancer. Dosage and Administration: Pre-medication consisting of oral dexamethasone 16mg/day for 3 days starting 1 day prior to docetaxel administration can be used. In case of prostate cancer the recommended premedication is oral dexamethazone 8mg, 12, 3 and 1 hour before docetaxel infusion. Prophylactic G-CSF may be used to mitigate the risk of haematological toxicity. Docetaxel is generally administered as 1-hour infusion every 3 weeks. Breast Cancer: In adjuvant treatment of operable node-positive and node negative breast cancer, recommended dose is 75mg/m2 administered 1-hour after doxorubicin 50mg/m2 and cyclophosphamide 500mg/m2 every 3 weeks for 6 cycles. For Adjuvant treatment of operable breast cancer whose tumors overexpress HER2: AC TH: AC (cycles 1-4): doxorubicin (A) 60 mg/m2 followed by cyclophosphamide (C) 600 mg/m2administered every three weeks for 4 cycles. TH (cycles 5-8): docetaxel (T) 100 mg/m2 administered every three weeks for 4 cycles, and trastuzumab (H)administered weekly as per schedule. TCH: TCH (cycles 1-6): docetaxel (T) 75 mg/m2 and carboplatin (C) at AUC of 6 mg/mL/min administered every three weeks and trastuzumab (H) administered weekly. Metastatic breast cancer: In first line treatment docetaxel 75mg/m2 is administered in combination with doxorubicin 50mg/m2. Combination with trastuzumab: Docetaxel dose is 100mg/m2 every 3 weeks with trastuzumab administered weekly. For 2nd line treatment docetaxel dosage is 100mg/m2 as single agent. Combination with capecitabine - Docetaxel 75mg/m2 every 3 weeks with oral capecitabine 1250mg/m2 twice daily (within 30 minutes after meal) for 2 weeks, followed by 1 week rest period. Non-Small cell lung cancer: Docetaxel 75mg/m2, followed by cisplatin 75mg/m2 over 30–60 minutes or arboplatin (AUC 6mg/mL/min) over 30–60min. For treatment after failure of prior platinum-based therapy, docetaxel 75mg/m2 is given as single agent. Ovarian Cancer: As second line treatment, recommended dosage of docetaxel is 100 mg/m2 as a single agent. Prostate Cancer: In hormone refractory metastatic prostate cancer docetaxel is administered as 75mg/m2 every 3 weeks and prednisone or prednisolone 5mg orally, twice daily is administered continuously. Gastric Cancer: In case of advanced gastric and gastroesophageal junction adenocarcinoma for those who have not received prior chemotherapy docetaxel is administered, 75 mg/m2 as a 1 hour infusion followed by cisplatin 75 mg/m2 as a 1-3 hour infusion (both on day one only) followed by 5-flurouracil 750 mg/m2 per day given as 24-hour continuous infusion for 5 days. Treatment repeated every 3 weeks for 4 cycles. Head and Neck cancer: For the induction treatment for locally advanced inoperable squamous cell carcinoma of the head and neck (SCCHN) the recommended dose is 75 mg/m2 as a 1 hour infusion followed by cisplatin 75mg/m2 over 1 hour on day one, followed by 5-fluorouracil as a continuous infusion at 750 mg/m2 per day for 5 days. To be administered every 3 weeks for 4 cycles. Following chemotherapy, patients should receive radiotherapy. - For the induction treatment of patients with locally advanced squamous cell carcinoma of the head and neck, the recommended dose of is 75 mg/m2 as a 1 hour intravenous infusion on day 1, followed by cisplatin 100 mg/m2 administered as a 30 minute to 3 hour infusion, followed by 5-fluorouracil 1000 mg/m2/day as a continuous infusion from day 1 to day 4. This regimen is administered every 3 weeks for 3 cycles. Following chemotherapy, patients should receive chemoradiotherapy. Contraindications: Severe hypersensitivity to the drug or polysorbate 80; patients with baseline neutrophil counts of <1500/mm3; pregnancy; severe liver impairment. Contraindications for otherdrugs also apply when combined with docetaxel. Precautions: Administration of corticosteroid therapy before docetaxel administration reduces the incidence and severity of fluid retention and hypersensitivity reactions. Neutropenia: Frequent monitoring of complete blood counts. Retreatment with docetaxel to be started when neutrophil recover to > 1500cells/mm3. Hypersensitivity reactions: Severe hypotension, bronchospasm or generalized rash/erythema or very rarely fatal anaphylaxis has been reported. Hypersensitivity reactions require immediate discontinuation of docetaxel. Patients with severe hypersensitivity should not be rechallenged with docetaxel. Cutaneous Reactions: Localized skin erythema of the extremities with oedema followed by desquamation has been observed. Fluid Retention: Patients with pleural and pericardial effusion and ascites should be monitored closely. Liver impairment: Higher risk of developing severe adverse reactions such as toxic deaths including sepsis and GI haemorrhage, febrile neutropenia, infections, thrombocytopenia, stomatitis and asthenia in patients treated with docetaxel at 100mg/m2 as single agent with transaminase levels greater than 1.5 times the ULN concurrent with serum alkaline hosphatase levels greater than 2.5 times the ULN. For patients with serum bilirubin levels >ULN and / or ALT and AST>3.5 times the ULN concurrent with serum alkaline phosphatase levels > 6 times the ULN, no dose reduction can be recommended and docetaxel should not be used unless strictly indicated. No data on patients with hepatic impairment. Nervous System: Severe neurosensory signs and / or symptoms have been observed and require reduction of dose. Cardiac Toxicity: Heart failure observed in patients receiving Taxotere in combination with trastuzumab, particularly following anthracycline containing chemotherapy. May be moderate or severe and has been associated with death. Eye disorders: Cystoid macular oedema (CMO) has been reported in patients treated with docetaxel, as well as with other taxanes; if diagnosed, docetaxel treatment should be discontinued and appropriate treatment initiated. Leukemia: In the treatment of adjuvant breast cancer, the risk of delayed myelodysplasia or myeloid leukaemia requires haematological follow-up. Interactions: Concomitant use of Taxotere® with strong CYP3A4 inhibitors should be avoided. Excipients: The amount of ethanol in Taxotere® may impair the ability to drive or use machines. Elderly: Patients equal to or greater than 60 years of age, treated with Taxotere and capecitabine combination therapy showed an increase in treatment related adverse events, serious adverse events and early withdrawals from treatment due to adverse events compared to patients less than 60 years of age. Pregnancy & Lactation: Contraindicated in pregnancy. It is not known whether docetaxel is excreted in human milk. Because of the potential for adverse reactions in nursing infants, breast feeding must be discontinued for the duration of docetaxel therapy. Undesirable effect: Very common ones include neutropenia (in pts who did not receive G-CSF), hypersensitivity reactions, cutaneous reactions, fluid retention, neurological, gastrointestinal effects, hepatic, alopecia, asthenia, arthralgias, myalgias, dysgeusia, generalized or localized pain, including chest pain, without any cardiac or respiratory involvement, infusion site reactions, renal and urinary disorders, Cases of hyponatraemia have been reported, mostly associated with dehydration, vomiting and pneumonia. Cases of permanent alopecia (frequency not known) have been reported. For full prescribing information please write to Saynovia Pharma PLC., 6/2/A, Segun Bagicha, Dhaka - 1000, Bangladesh. Revised: November 2019 Source: CCDS version 30 Dated 16 Nov 2015

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

synovia
hope. health. happiness.

TAXOTERE® (docetaxel)
Time Life Confidence
in adjuvant breast cancer

Live boundless

Eloxatin®

OXALIPLATIN 5 mg/ml

More than 20 years of Global Experience[1]

FDA Approved in early and advanced Colorectal Cancer[2]

Scan here for relative informations

Reference: 1. Synovia Data on File 2. Eloxatin Prescribing Information

Syntabine™

Capecitabine USP

Symbolising Excellence

Less hospitalization with lower treatment cost

Higher patient convenience

Better safety profile

Scan here for relative informations

synovia
hope. health. happiness.

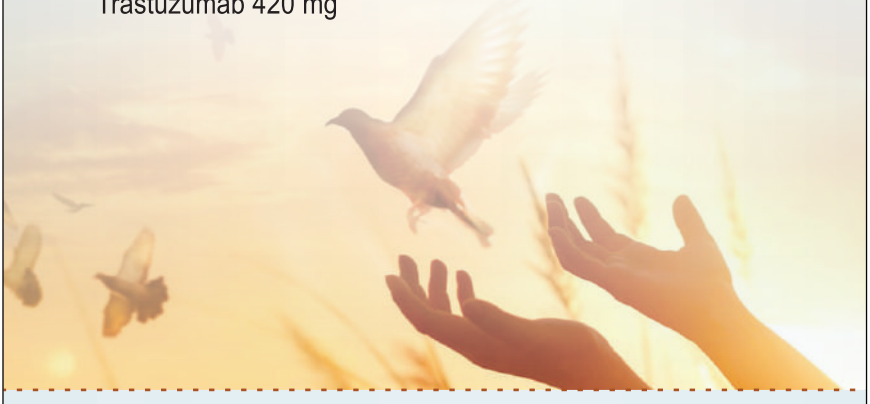
Synovia Pharma PLC.
A subsidiary of BEXIMCO PHARMA
6/2/A, Segun Bagicha, Dhaka -1000, Bangladesh
Tel : +880 9678000777 | Fax : +880 2223380009
www.synoviapharma.com | synoviapharmaplc

Eloxatin® is a registered trademark of Sanofi, France.
Syntabine™ is a registered trademark of Synovia Pharma PLC.
For more information, visit: www.synoviapharma.com

Tresoda™

Trastuzumab 420 mg

A sign of hope
a promise of new life



Brolizum™ 100

Pembrolizumab INN 100 mg

The New Age Solution
for **Cancer Treatment**

Incepta Pharmaceuticals Ltd

Transforming Oncology and Hematology with Innovative Oral Generics

Available ☑
Affordable ☑
Accessible ☑

www.everestpharmabd.com

SOLID TUMORS	ORAL TARGET THERAPIES
Lung Cancer	Alecnib ALECTINIB 150 mg Cap; Lorbrexen LORLATINIB 100 mg Tab; Capmaxen CAPMATINIB 200 mg Tab; Sotoxen SOTORASIB 120 mg Tab; Adakras ADAGRASIB 200 mg Tab; Daconib DACOMITINIB 45 mg Tab; Osimert OSIMERTINIB 80 mg Tab; Repotrex REPOTRECTINIB 40 mg Cap; Selcaxen SELPERCATINIB 40 mg Cap; Laronib LAROTRECTINIB 25 & 100 mg Cap
Breast Cancer & Ovarian Cancer	TUCAXEN TUCATINIB 150 mg Tab; PALBOXEN PALBOCICLIB 125 mg Cap; Alpesib ALPELISIB 150 mg Tab; Capivast CAPIVASERTIB 200 mg Tab; RIBOKIS Ribociclib Succinate INN; Talaparib TALAZOPARIB 1 mg Cap; Olanib OLAPARIB 150 mg Tab; Olanib OLAPARIB 50 mg Cap; Niranib NIRAPARIB 100 mg Cap
Liver Cancer	Caboxen CABOZANTINIB 20 & 80 mg Cap; Lenvaxen LENVATINIB 4 & 10 mg Cap; Hepanib SORAFENIB 200 mg Tab
Renal Cell Carcinoma	TIVOXEN TIVOZANIB 1.34 mg Cap; Caboxen CABOZANTINIB 20 & 80 mg Cap; Pazorest PAZOPANIB 200 mg Tab
Prostate & Colorectal	Prostaxen APALUTAMIDE 60 mg Tab; Trifluxen TRIFLURIDINE 15 mg & TIPIRACIL 6.14 mg Tab; FRUQUIN FRUQUINTINIB 5 mg Cap; Erdafixen ERDAFITINIB 4 mg Tab

ZAS Corporation Ltd.

Bringing GLOBAL PIONEERS TO YOU

Alvogen

VINORELBINE
soft capsule 30 mg
Vinorelbine (as tartrate)

TO IMPROVE SURVIVAL
BY PRESERVING
QUALITY OF LIFE

EVER PHARMA

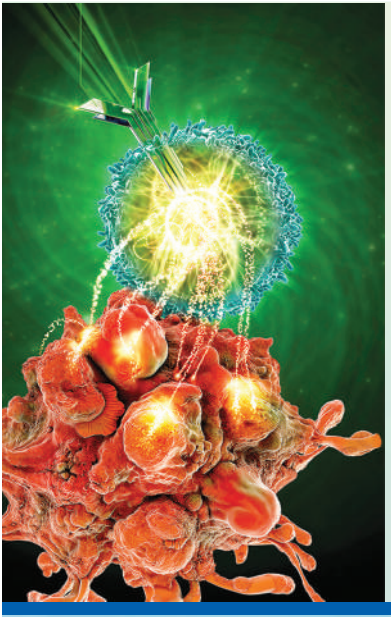
Fulvestrant
EVER Pharma
Fulvestrant 250 mg

TOGETHER
to the next Moment

CELLTRION

Herzuma®
Trastuzumab

Elevate Confidence
Based on Evidence



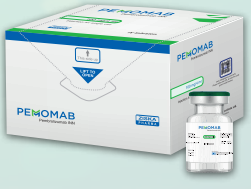
PEMOMAB

Pembrolizumab INN 100 mg/ 4 ml

1st PD-1 inhibitor

A REVOLUTION IN CANCER TREATMENT

- 1st PD-1 inhibitor
- US-FDA approved to treat 16 types of advanced cancer
- Biosimilar to innovator brand
- Manufactured with RTF API with unique product authentication code



Nivamo

40 mg/4 ml
100 mg/10 ml

Nivolumab INN

Empowering Immunity, Transforming Lives

- FDA approved 1st line treatment of mUGI cancer regardless of PD-L1 status
- Ensures long term survival in Gastroesophageal Cancer
- Approved to treat 10 types of advanced cancer
- Biosimilar to innovator brand

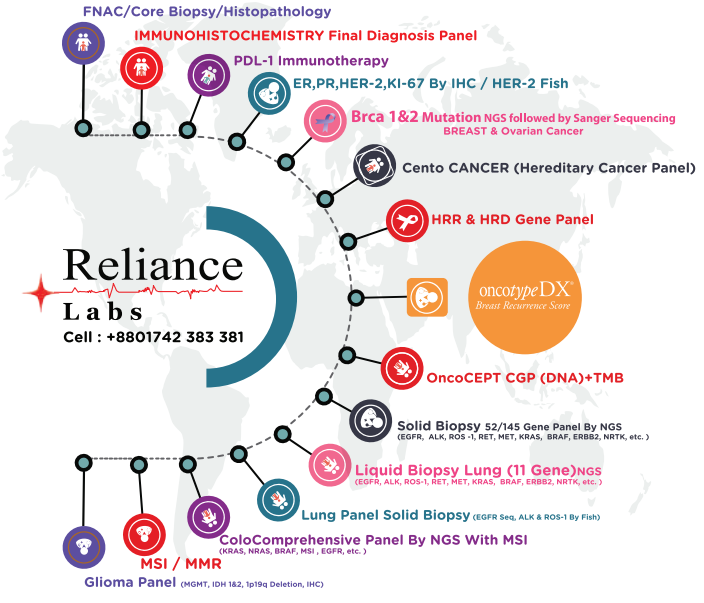
Ziska Pharmaceuticals Ltd.

Web: www.ziskapharma.com

Oncology & Biotech

One Stop Solution For

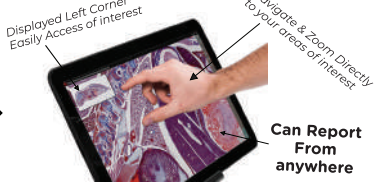
Helping Physicians To Make Better Clinical Decision



- Collaboration with world renowned Laboratory
- CAP and CLIA Certified NGS Based Panel (11 to Thousands of genes)
- Home Sample Collection
- Online Report Delivery

Introducing

Digital Microscope With Scanner



Provide instant Overview of your entire sample

Reliance
Labs

Firoz Tower 152/3-B, 4th Floor, Panthapath, Dhaka 1205.
Phone : +8801742 383 381 , +8801685 897 688
Email : masum.rabbani@gmail.com

Taxopac®

Paclitaxel USP

Taxodoc®

Docetaxel

MANUFACTURED *in*

- Dedicated and cutting edge factory
- Multiple sterilization steps to ensure Aseptic Process
- Impurity tested in accordance to ICH (International Council of Harmonisation)
- Fully automated and human touch free production with Advanced Isolator Technology

RENATA PLC

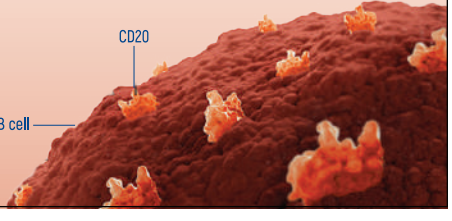
Mabrix®

Rituximab

100mg/Vial & 500mg/Vial

Committed To Precision For Complete Remission

CREATING BREAKTHROUGHS
FOR **CD20⁺ MALIGNANCIES**



ACI

1st time in Bangladesh

Exemis™

Exemestane BP 25 mg Film Coated Tablet

Renews Hope to Embrace Life

- Proven superiority over Tamoxifen
- Safer and more effective than Letrozole
- Can be consumed for 6 days

1st time in Bangladesh

Fulvest™

Fulvestrant INN 250 mg/5mL IM Injection

The Guiding Light in Breast Cancer

- **NCCN** recommended preferred 1st Line therapy against breast cancer
- Safer than Tamoxifen on long term use
- Superior therapeutic choice as monotherapy & in combination with Abeclib™

SK+F ONCOLOGY

ESKAYEF PHARMACEUTICALS LTD.

Approved by: US FDA | UK MHRA | EU GMP | TGA Australia | VMD UK

Jenphar | جنفار
Bangladesh | بنغلاديش

BEXIMCO PHARMA ONCOLOGY

The **First US FDA & EMA** approved
Biosimilar Trastuzumab and Pegfilgrastim brands in Bangladesh

Ogivri® 440 mg
trastuzumab

Fulphila®
pegfilgrastim 6mg/0.6ml Injection

Continuing the promise of quality in Chemotherapeutic brands

Gemzen®
Gemcitabine 1 g and 200 mg Lyophilized Powder for Injection

Pacli®
Paclitaxel 30, 100 & 300 mg IV Infusion

Xelocin®
Capecitabine 500 mg Tablet

Kaneva®
Erlotinib 100 & 150 mg Tablets

Tinicev®
Imatinib 100 & 400 mg Tablet

Taxedol®
Docetaxel USP 20 & 80 mg IV Infusion

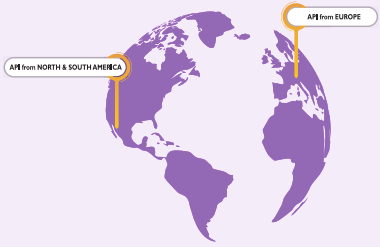
NOVARTIS

Reimagining medicine, together

We are passionate about discovering new ways to improve and extend people's lives.

For more information:
Novartis (Bangladesh) Limited
Tower One One Seven (Level 5)
Plot # 117/A, Tejgaon Industrial Area
Dhaka 1208, Bangladesh

Quality API to assure quality outcomes



US DMF Grade API
-Ensures Optimum Purity
-Assures Quality Outcomes

Aritax 100 mg Inj. | 300 mg Inj.
Paclitaxel USP
Quality that Supports the Faith

Aricarb 150 mg Inj. | 450 mg Inj.
Carboplatin USP
Platinum Analogue with Better Tolerability

Ariplat 10 mg Inj. | 50 mg Inj.
Cisplatin BP
A Versatile Platinum Chemotherapy

FILGRASTIM USP
Filgen Pre-filled Syringe
30 MU
An effective solution for Neutropenia

Coming... SOON

Rituximab INN
100 & 500 mg Inj.

Bevacizumab INN
100 & 400 mg Inj.

ARISTOPHARMA LTD.

ARISTO ONCOLOGY

Your Full Spectrum Support

in Breast & Prostet Cancer Treatment

	Indications[1-4]	Indications[1-4]
Arimidex® anastrozole INN **1 mg tablet**	• Adjuvant therapy for post-menopausal women with HR-positive, early invasive BC • Adjuvant therapy for post-menopausal women with HR-positive who received 2-3 years of tamoxifen	One 1 mg tablet, once daily
FASLODEX™ fulvestrant injection **Pre-filled syringe contains 250 mg fulvestrant in a 5 ml solution**	• Monotherapy for post-menopausal women with ER-positive, locally advanced, or metastatic BC who did not receive endocrine or relapse or progression after antiestrogen therapy • In combination with palbociclib for patients with HR-positive, HER2-negative locally advanced or metastatic BC who received prior endocrine therapy	500 mg intramuscular injection once a month
Zoladex 3.6 mg goserelin INN **Pre-filled syringe contains 3.6 mg of goserelin**	• For pre- and peri-menopausal women with advanced BC • Alternative to chemotherapy in the standard of care for pre- and peri-menopausal women with ER-positive early BC	3.6 mg depot via SC injection every 28 days
Casodex bicalutamide **50 mg**	• For advanced PC in combination with LHRH or surgical castration • For patients with locally advanced, non-metastatic PC in whom surgical castration or other intervention is not considered acceptable	50 mg: One tablet, once daily
Zoladex 3.6 & 10.8 mg goserelin INN **Pre-filled syringe contains 3.6 & 10.8 mg of goserelin**	• For advanced PC in combination with LHRH or surgical castration • For PC patients suitable for hormonal manipulation	3.6 mg: SC injection every 28 days 10.8 mg: SC injection every 12 weeks

Arimidex, anastrozole 1 mg tablet

Faslodex, fulvestrant 250 mg solution

Zoladex, goserelin INN 3.6 mg injection

Casodex, bicalutamide 50 mg injection

Zoladex, goserelin INN 3.6 & 10.8 mg injection

AstraZeneca

Adverse events should be reported. Reporting forms and information can be found at https://aereporting.astrazeneca.com

For full prescribing information, please contact:
MGH Healthcare Limited
9th Floor, SKA Tower (Autograph Building), Plot 67 & 68
Kemal Ataturk Avenue, Banani, Dhaka – 1213, BANGLADESH
Telephone: +88-02-55033267-68 (Ext.702)
Website: www.mghgroup.com

Document Number: BD-0416-Approved for Distribution Date: 22/05/2023-Expiry Date: 22/05/2025

MGH HEALTHCARE

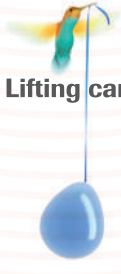
PHESGO®

PERTUZUMAB-TRASTUZUMAB

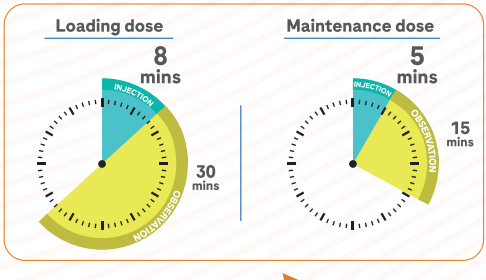
Roche

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, 24-hour 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

Imported by Radiant Business Consortium Limited, 474 P. Road No 3, Sector 12 Uttara, Dhaka, Bangladesh

Reference: Phesgo Product Information December 2020

Full Product Information

Registered product of

Roche Bangladesh Limited
Ninakabbo, 227/A, Level-11 (South), Tejgaon Gulshan Link Road, Tejgaon I/A, Dhaka-1208, Bangladesh.
Tel: +8809606403020, www.roche.com.bd

Promotion Partner

Radiant Pharmaceuticals Limited
SKS Tower, Level (7&8), 7 VIP Road, Mohakhali, Dhaka 1206, Bangladesh,
Phone:+8809835717

M-BD-00000809

PAXEL®
Paclitaxel USP

Docefrez®
Docetaxel USP

Xelobine®
capecitabine

Oxaliplat RFI®
oxaliplatin

Healthcare
Oncology

Healthcare

1ST OEB-5
Anti-Cancer Facility in Bangladesh

Striving for Excellence

QbD QUALIFIED

Healthcare Oncology

IS NOW EU GMP COMPLIANT

Achieving Global Excellence in Oncology

- Our commitment towards excellence is going to be recognized with EU-GMP accreditation.
- Since 2014, Healthcare Oncology Ensures world-class quality and safety in cancer treatment.
- And Now, We are Challenging Our Limits, breaking barriers, Becoming Global.

Healthcare Pharmaceuticals Limited

BANGLADESH
BREAST
CANCER
CONFERENCE
2025

Conference secretariat

BSH BANGLADESH SPECIALIZED HOSPITAL
Because you are special

Graphic Designed by
Artistic Communication

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