

ORGANIZED BY



# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

JUPITER LISBOA-HOTEL  
November 10-11, 2025 | Lisbon, Portugal



**ACCREDITED  
PROVIDER**

#778533

Verify @ <https://theCPDregister.com>



## WFBCC - 2025

Nov 10-11, 2025 | Lisbon, Portugal

ISBN: 978-1-917892-24-7

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

## DAY-1 (NOVEMBER 10)

### REGISTRATIONS & OPENING REMARKS (08:30-09:00)

### KEYNOTE PRESENTATION (09:00 - 10:30)

09:00-09:30	<b>Home self-testing of complete blood count in patients with breast cancer during chemotherapy</b> Dr. Niels Henrik Hollander, Zealand University Hospital, Denmark
09:30-10:00	<b>Stromal cells support the survival of human primary tumor cells through Lyn-driven extracellular vesicles</b> Dr. Hinrich P. Hansen, University Clinic Cologne, Germany
10:00-10:30	<b>Evolving Strategies in Cervical Cancer Prevention: The Role of biomarkers and a novel adsorbent and antioxidative vaginal gel</b> Prof. Attila Major, Femina Gynecology Center, Switzerland

### GROUP PHOTO & REFRESHMENT BREAK (10:30-10:45)

### TECHNICAL SESSION-I (10:45-11:45)

10:45 -11:05	<b>18F-FDG PET/CT impact in infective endocarditis: pilot single-centre SUV metrics and outcomes</b> Dr. Pipitsa N. Valsamaki, Democritus University of Thrace, Greece
11:05-11:25	<b>Mediastinal lesion characterization and prognostication using diffusion MRI: from whole lesion to target zone with dynamic approach</b> Dr. Johan Coolen, University Hospitals of Leuven, Belgium
11:25 -11:45	<b>Structured Reporting as the Key to Patient-Centered and Responsible AI Integration in Radiology</b> Dr. Igor Toker, Neo Q Quality in Imaging GmbH, Germany

### TECHNICAL SESSION-II (11:45-13:05)

11:45-12:05	<b>The Need for a Holistic Guide to Prevent and Manage Radiation Dermatitis in Patients' with Breast Cancer: A Case Report</b> Dr. Deborah Sherman, Florida International University, USA
12:25-12:45	<b>Paramagnetic core/shell nanoparticles for cancer detection in animal models</b> Prof. Barbara Blasiak, Institute of Nuclear Physics Polish Academy of Science, Poland
12:45-13:05	<b>Discovering hereditary breast cancer genes from families and large population</b> Prof. Michal Linial, The Hebrew University of Jerusalem, Israel

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

LUNCH @ RESTAURANT (13:05- 13:45)

TECHNICAL SESSION- III (13:45- 15:25)

**13:45-14:05** Are professional caregivers of people with intellectual disability sufficiently trained for cancer prevention, monitoring and screening? An evaluation on 933 questionnaires in France

Dr. Daniel Satge, Oncodéfi, France

**14:05-14:25** Restriction of cancer metastasis - Translating gene discovery into clinical application

Prof. Ulrike Stein, Charite and MDC, Germany

**14:25-14:45** Glymphatic system dysfunction and sleep disorder in multiple sclerosis

Dr. Teddy Salan, University of Miami, USA

**14:45-15:05** Improving Digital Health Diagnosis and Interpretation with Deep Learning

Prof. Shadi Basurra, Birmingham City University, UK

**15:05-15:25** Colposcopy at 100: Celebrating Innovation Amid Ethical Shadows

Dr. Marcin Sniadecki, Medical University of Gdansk, Poland

REFRESHMENT BREAK (15:25-15:40)

POSTER PRESENTATION (15:40-16:00)

**Poster-I** Triple synchronous primary cancers comprising large cell neuroendocrine carcinoma of the lower uterine segment and endometrioid carcinomas of the uterine corpus and the right ovary-a rare combination: A case report

Dr. Kaichiro Yamamoto, Ikoma City Hospital, Japan

**Poster-II** HE4: A New Potential Tumor Marker for Early Diagnosis and Prediction of Breast Cancer Progression

Ms. Martina Pestova, University Hospital Pilsen and Medical faculty Pilsen, Czech-Republic

**Poster-III** Immunomodulatory Role of Ginkgolide B in Oral Cancer via the SREBP1/KLK8/CCL22 Pathway

Dr. Shu-Chun Liu, Chang Bing Show Chwan Memorial Hospital, Taiwan

**Poster-IV** Pyoderma gangrenosum mimicking inflammatory breast cancer: A case report

Prof. Essaada Belglaiaa, Higher Institute of Nursing Professions and Health Technologies, Morocco

**Poster-V** 18F-FDG PET/CT in Richter syndrome: preliminary analysis of a single-center cohort

Dr. Pipitsa N. Valsamaki, Democritus University of Thrace, Greece

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

**Poster-VI**      **Beyond the image frame: How Italian High Renaissance Paintings Can be Used to Teach Medical Students to Interpret Patient Symptoms?**  
Dr. Marcin Sniadecki, Medical University of Gdansk, Poland

**Poster-VII**      **Potential serum biomarkers for early detection of diabetic nephropathy**  
Prof. Tarek Kamal Motawi, Cairo University, Egypt

## TECHNICAL SESSION- IV (16:00- 18:00)

**16:00:-16:20**      **Awareness toward cervical cancer among HIV-positive Moroccan women: a cross-sectional study**  
Prof. Essaada Belglaiiaa, Higher Institute of Nursing Professions and Health Technologies, Morocco

**16:20-16:40**      **Breaking the Silence in Immunotherapy : A Two-Cyled Podcast-led Quality Improvement Project for Immunotherapy Education**  
Dr. Anjali Rajkumar, University Hospitals Bristol and Weston NHS Foundation Trust, UK

**16:40-17:00**      **Improving participation and knowledge of people with intellectual disabilities in cancer screening: the PAM study**  
Ms. Elodie Neumann-Michel, Oncodéfi, France

**17:00-17:20**      **Strategic and Evidence-Based Use of Tumor Markers in Oncology: Practical Insights from a Multidisciplinary Clinical Center**  
Prof. Ondrej Topolcan, University Hospital Pilsen and Medical faculty Pilsen, Czech-Republic

**17:20-17:40**      **Ultrasonography Findings Of Testicular Tuberculosis In Nepalese Patients: A Case Series**  
Dr. Sushmit Kafle, Pokhara University Teaching Hospital, Nepal

**17:40-18:00**      **Population-Based Analysis of Breast Cancer Incidence and Survival in Monastir, Tunisia**  
Dr. Imen Zemni, Monastir University Hospital, Faculty of Medicine of Monastir, University of Monastir, Tunisia

## PANEL DISCUSSIONS

## DAY-1 CONCLUDES



# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

## DAY-2 (NOVEMBER 11)

09:30-10:00	<b>Open abdomen and negative pressure wound therapy for acute peritonitis especially in the presence of anastomoses and ostomies</b> Prof. Orestis Ioannidis, Aristotle University of Thessaloniki, Greece
10:00-10:25	<b>Role of advanced interventional procedures to facilitate major liver surgery</b> Dr. Ramanivas Sundareyan, University Hospitals NHS Foundation Trust, UK
10:25-10:50	<b>Microwave ablation treatment of non-lactating mastitis</b> Dr. Ailisai Ding, Guangyuan Central Hospital, China
10:50-11:15	<b>Basal Cell Carcinoma: Diagnosis, Management and Prevention</b> Prof. P Umar Farooq Baba, SKIMS, India
11:15-11:40	<b>Dissolving Tumor Heterogeneity in the CAM Model</b> Prof. Regine Schneider-Stock, UKER, FAU Erlangen-Nürnberg, Germany
11:40-12:05	<b>Upper tibial MRI vascular marks lost in early knee osteoarthritis</b> Dr. Michael Beverly, Botnar Research Centre OX3 7LD, England
12:05-12:30	<b>Zero Echo Time MRI: A Novel Approach for Craniofacial Bone Morphometric Sex Estimation</b> Dr. Mohinder Sharma, Postgraduate Institute of Medical Education & Research, India
12:30-12:55	<b>Pre-clinical evaluation of kaempferide, a flavonoid from <i>Chromolaena odorata</i>, as a potential drug candidate against cervical cancer</b> Dr. Ruby John Anto, Centre of Excellence in Nutraceuticals, India
12:55-13:20	<b>Sex Estimation from Cochlear Morphology: MRI-Based Analysis and Forensic Applications</b> Dr. Sushil Kumar Battan, Postgraduate Institute of Medical Education & Research, India
13:20-13:45	<b>Beyond Cancer Detection: An AI Framework for Multidimensional Risk Profiling on Contrast-Enhanced Mammography</b> Dr. Graziella Di Grezia, Link Campus University, Italy
13:45 - 14:10	<b>Splenic diffuse red pulp small B-cell lymphoma with overlapping clinical and immunophenotypic features with hairy cell leukaemia</b> Dr. Mirette Hanna, RVH, Canada

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

14:10-14:35	<b>MuscleJ2: An Automated Bioinformatics Tool for Standardized Histological Analysis of Muscle Biopsies</b> Dr. Alicia Mayeuf-Louchart, INSERM Lille Neuroscience et Cognition, France
14:35-14:40	<b>Underfed and Overlooked: Malnutrition as a Predictor of Postoperative Complications in Gastric Surgery</b> Dr. Navaneeth Ranjith, Western Health and Social Care Trust, UK
14:40-15:05	<b>High Doses of Multiple Antioxidants Kill Cancer Cells and Enhance Growth-Inhibitory Effects of X-Irradiation and Chemotherapeutic Agents on Cancer Cells Irrespective of Type and Stage while Protecting Normal cells</b> Dr. Kedar N Prasad, Engage GLOBAL, INC., USA
15:05-15:10	<b>Seeing the Unseen: IFI as a Game Changer in Breast-Conserving Surgery</b> Dr. Navaneeth Ranjith, Western Health and Social Care Trust, UK
15:10-15:35	<b>Delivery of a virtually supervised exercise intervention for Hispanic and Latina breast cancer survivors: Lessons learned from the ROSA trial</b> Dr. Christina M. Dieli-Conwright, Harvard Medical School, USA
15:35-16:00	<b>Development of a Novel Large Diameter Cryoprobe For Cavity Treatment Following Breast Cancer Tumor Resection</b> Dr. John M Baust, CPSI Biotech, USA

PANNEL DISCUSSIONS

END OF DAY-02

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



Lennart Friis-Hansen, Pippi Jonassen Bjørck, Ditte Hartvig, Susanne Andresen, Berit Rasmussen, Christina Hansen<sup>1</sup> Anne Nistrup<sup>4</sup> Keld Hundewadt, **Niels Henrik Holländer<sup>1</sup>**

Dept of Oncology, Zealand University Hospital, Denmark

## Home self-testing of complete blood count in patients with breast cancer during chemotherapy

### Background

Before administration of myelosuppressive chemotherapy complete blood counts (CBC) collected at the hospital/nursing stations are evaluated to avoid severe bone marrow suppression. This maintains disease fixation which often reduces their quality of life. This mixed-method study examined at home self-testing of complete blood count (CBC), the test quality, and the effects on patients' mental well-being.

### Objective

We therefore examined if the blood tests, which are a central part of monitoring the treatment effects, could be performed by the patients themselves in their own homes.

### Methods

Patients with breast cancer receiving chemotherapy were recruited and trained to perform capillary finger prick CBC testing at home using the HemoScreen Point-of-Care instrument and to upload the test results to the hospitals IT system subsequently. A venous reference CBC sample was taken and tested at the hospital on the day of self-testing. Semi-structured interviews with open-ended components were performed to investigate the user experience and the impact of self-testing on the patients' everyday lives.

### Results

Thirty-nine patients completed the self-testing education using the HemoScreen instrument. Eight patients withdrew, while the remaining 31 patients performed 161 home tests (2-11 tests per patient) over a four-month period. The test results compared well with the venous reference CBCs except for platelet counts (correlation coefficient 0.26). Qualitative interviews with 9 of the 31 patients emphasized that the patients were comfortable using the self-testing instrument and becoming an active partner in their own treatment.

### Conclusion

Before administration of myelosuppressive chemotherapy complete blood counts (CBC) collected at the hospital/nursing stations are evaluated to avoid severe bone marrow suppression. This maintains disease fixation which often reduces their quality of life. This mixed-method study examined at home self-testing of complete blood count (CBC), the test quality, and the effects on patients' mental well-being.

### Biography

Niels Henrik Holländer is a senior oncologist, and his expertise is in innovation of e-health care for Cancer Patients. He has been the leader of several international cross boarder projects with the focus on Home self-testing of complete blood count in patients with cancer during chemotherapy. He is the leader of Advanced Modeling of Baltic cancer e-caRe (Amber).

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



Thaís Dolzany de Oliveira<sup>1</sup>, Alexander vom Stein<sup>1</sup>, Rocio Rebolledo-Rios<sup>1</sup>, Liudmila Lobastova<sup>1</sup>, Marcus Lettau<sup>2</sup>, Sabine Barnert<sup>3</sup>, Ottmar Janssen<sup>2</sup>, Prerana Wagle<sup>4</sup>, Phuong-Hien Nguyen<sup>1</sup>, Michael Hallek<sup>1</sup> and **Hinrich P. Hansen<sup>1\*</sup>**

<sup>1</sup>University of Cologne, Department I of Internal Medicine, Center for Integrated Oncology Aachen Bonn Cologne Duesseldorf; Center for Molecular Medicine Cologne; Center of Excellence on Cellular Stress Responses in Aging-Associated Diseases, 50931 Cologne, Germany

## Stromal cells support the survival of human primary tumor cells through Lyn-driven extracellular vesicles

### Keywords

Extracellular vesicle, Lyn kinase, extracellular matrix, endosialin

Stromal cells and in particular cancer-associated fibroblasts (CAFs) support tumor cells and cause therapeutic resistance of many malignant diseases, including breast cancer. CAFs promote tumor cell growth through direct cell contact, soluble factors and extracellular vesicles (EVs). The protein tyrosine kinase Lyn is expressed in the malignant and stromal cells of breast cancer tissue. It serves as a significant prognostic factor of the disease and is associated with the triple-negative phenotype. We studied the role of Lyn in the EV-based communication between stromal and tumor cells. We compared the Lyn-dependent EV release, uptake and functionality using Lyn-proficient and -deficient stromal cells and primary CLL cells. Lyn-proficient cells caused a significantly higher EV release and EV uptake as compared to Lyn-deficient cells and also conferred stronger support of tumor CLL cells. Proteomic comparison of the EVs from Lyn-proficient and -deficient stromal cells revealed 70 significantly differentially expressed proteins. Gene ontology studies categorized many of which to organization of the extracellular matrix, such as collagen, fibronectin, fibrillin, Lysyl oxidase like 2, integrins and endosialin (CD248). In terms of function, a knockdown of CD248 in Lyn<sup>+</sup> HS-5 cells resulted in a diminished B-CLL cells feeding capacity compared to wildtype or scrambled control cells. CD248 is a marker of certain tumors and cancer-associated fibroblast (CAF) and crosslinks fibronectin and collagen in a membrane-associated context.

Our data provide preclinical evidence, that the tyrosine kinase Lyn crucially influences the EV-based communication between stromal and primary tumor cells by raising EV release and altering the concentration of functional molecules of the extracellular matrix. (256).

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

## **Biography**

Dr. Hinrich Hansen is a Professor in the Department of Internal Medicine I at the University Clinic Cologne, Cologne, Germany. His research expertise spans Clinical Pathology, Histopathology, Hematopathology, Surgical Pathology, and Diagnostic Pathology. Dr. Hansen has made significant contributions to the field through his extensive research and publications in leading international journals. He also serves as an editorial board member and reviewer for several reputed scientific journals. In addition to his academic and research accomplishments, he has successfully undertaken various administrative and leadership responsibilities. Dr. Hansen has authored numerous research articles and books focusing on Clinical and Experimental Pathology.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



<sup>1</sup>**Prof. Attila L. Major, MD, PhD,** <sup>2</sup>**Prof. Kudrat Jumaniyazov,** <sup>3</sup>**Dr. Mukhabbat Akhmedova**

<sup>1</sup>Femina Gynecology Center, Geneva, Switzerland

<sup>2</sup>Urgench Branch of Tashkent Medical Academy, Uzbekistan

<sup>3</sup>Tashkent Medical Academy, Uzbekistan

## **Evolving Strategies in Cervical Cancer Prevention: The Role of biomarkers and a novel adsorbent and antioxidative vaginal gel**

Current cervical cancer screening methods, while effective, result in a substantial number of unnecessary conizations -nearly 50%- which may be associated with significant long-term complications, including preterm delivery and infertility. This highlights the urgent need for improved risk stratification while maintaining high diagnostic accuracy.

This presentation will detail a modern, biomarker-driven strategy for prevention. The dual-stain test for p16/Ki-67 (CINtec® PLUS) is a pivotal triage tool for HPV-positive women, objectively identifying transforming infections with high oncogenic potential. Its integration into international guidelines (ASCCP, WHO) significantly improves colposcopy referral accuracy, reducing unnecessary procedures.

For women under surveillance ("wait and watch"), we explore a non-surgical therapeutic intervention. Data from prospective, controlled trials on an adsorbent and antioxidative vaginal gel, a medical device class IIa, will be presented. A 3-month treatment course demonstrates significant promotion of regression of cytological abnormalities (74% in the treatment group TG and 18% compared with the control group CG) and significant clearance of high-risk HPV (51% in TG, 9% in CG) and p16/Ki-67 positivity change (83% TG, 18% CG) compared to watchful waiting. The gel also shows a protective effect against new HPV infections.

In conclusion, the integration of advanced biomarkers like p16/Ki-67 for precise risk stratification, combined with effective non-surgical therapeutic options like this vaginal gel application, represents a modern, patient-centric approach to cervical cancer prevention. This strategy aims to minimize overtreatment and its associated risks while effectively managing precancerous lesions, aligning with the latest clinical guidelines and the goals of preventive medicine.

### **Keywords**

Cervical Cancer Prevention, HPV, p16/Ki-67, adsorbent and antioxidative vaginal gel, Conization, Overtreatment.



# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

## References

1. Egemen D, Cheung LC, Chen X, et al. Risk Estimates Supporting the 2019 ASCCP Risk-Based Management Consensus Guidelines. *J Low Genit Tract Dis.* 2020;24(2):132-143. doi:10.1097/LGT.0000000000000529
2. Major AL, Dvořák, V, Schwarzová J, et al. Efficacy and safety of an adsorbent and anti-oxidative vaginal gel on CIN1 and 2, on high-risk HPV, and on p16/Ki-67: a randomized controlled trial. *Arch Gynecol Obstet.* (2020). doi.org/10.51219/URForum.2025.Niels-Henrik-Hollander10.1007/s00404-020-05816-8
3. Major AL, Skřivánek A, Grandjean EM, et al. An Adsorptive and Antioxidant Vaginal Gel Clears High-Risk HPV- and p16/Ki-67-Associated Abnormal Cytological Cervical Findings: A post-hoc Subgroup Analysis of a Prospective Randomized Controlled Trial on CIN2 and p16 Positive CIN1. *Front Med (Lausanne).* 2021;8:645559. Published 2021 May 25. doi:10.3389/fmed.2021.645559
4. Major AL, Mayboroda I, Riger A. Successful Preventive Treatment of Oncogenic Transforming HPV Infections in Low-Grade Cytology (ASC-US/LSIL) Patients with an Adsorptive and Antioxidant Vaginal Gel. *J Clin Med.* (2023) doi.org/10.51219/URForum.2025.Niels-Henrik-Hollander10.3390/jcm12124142.

## Biography

Prof. Attila Louis Major, MD, PhD, is Head of the Femina Gynecology Center in Geneva, Privatdocent at the University of Fribourg and Professor of Urgench Branch of Tashkent Medical Academy. He is a Swiss and European board-certified specialist in gynecology and obstetrics, with previous senior appointments at the University Hospitals of Geneva and Zurich. His main research interests include cervical cancer prevention, biomarker-driven risk stratification, non-surgical therapeutic interventions, and advanced laparoscopic techniques. Author of numerous peer-reviewed publications and Associate Editor of *Frontiers in Medicine*, he has been recognized with multiple international awards in gynecologic oncology and minimally invasive surgery

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Deborah Witt Sherman**

Florida International University, Nicole Wertheim College of Nursing and Health Science, Miami, FL, USA

## **The Need for a Holistic Guide to Prevent and Manage Radiation Dermatitis in Patients' with Breast Cancer: A Case Report**

Radiation therapy (RT) is often indicated in the treatment of breast cancer following breast conserving surgery or mastectomy, yet carries a 95% risk of radiation dermatitis (RD) of varying severity within one to four weeks of treatment. This presentation will discuss a case study of M. R., who is a 64-year-old Caucasian woman, diagnosed with invasive adenocarcinoma of the left breast, who underwent a lumpectomy with a positive sentinel node biopsy, and received RT, five days a week for six weeks. This presentation will explain the progression of RD and the associated burdens of skin breakdown, pain, psychological distress, and functional challenges. Given limited patient education regarding the prevention and management of RD, a Clinician Guide and Evidence-based Skin Care Plan will be discussed to offer a holistic, patient-centered approach to care, with optimal strategies to address her physical, emotional, and functional well-being and enhance her quality of life and survival. Highlighted in the Clinician Guide are the importance of developing a trustworthy patient-clinician relationship, emotional support, social support, education, weekly physical assessments, assessment of overall adjustment to a cancer diagnosis and treatment, promotion of patient engagement and self-care, reinforcement of healthy lifestyles, and patient adherence to the Evidence-based Skin Care Plan during radiation therapy. These strategies are expected avoid treatment delays or discontinuation, and increase the likelihood of disease-free survival and quality of life.

### **Keywords**

Case Report, Breast Cancer, Radiation Dermatitis, Evidence-based Skin Care, Clinician Guide

### **Biography**

Dr. Deborah Witt Sherman is a professor of nursing at Florida International University, and is recognized as a national and international leader in Palliative Care and interprofessional collaboration in healthcare education and research. Funded by the Soros Foundation, Dr. Sherman began the first Palliative Care Nurse Practitioner Program in the US, and Japan. She edits an award-winning Palliative Care textbook, serves as a consultant, grant reviewer, editorial board member, and associate editor of the Journal of Palliative Medicine, with authorship of over 90 publications, 43 book chapters, 5 books, and over 195 presentations. Dr. Sherman has an active program of research in palliative care and interprofessional collaboration, and is certified as an Adult and Palliative Care Nurse Practitioner.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Michal Linial**

Dept of Biological Chemistry, The Hebrew University of  
Jerusalem, Jerusalem, Israel

## Discovering hereditary breast cancer genes from families and large population

Understanding inherited genetic risk is essential for advancing early detection, prevention, and personalized treatment of breast cancer (BC). While several breast cancer risk loci such as BRCA1/2 have been identified, their biological mechanisms often remain unclear. For discovery of cancer predisposition genes (CPG) and to improve interpretability, we analyzed BC predisposition in the UK Biobank (UKB) using a gene-based approach called proteome-wide association studies (PWAS), which links germline variants to protein function. PWAS identified both known and novel genes that were significantly associated with BC risk, including genes showing protective effects, where damaging variants were linked to reduced risk. Combined with GWAS, we uncovered several novel risk loci and highlighted the importance of recessive inheritance. Furthermore, we revisiting exome sequences from BC-affected members belonging to over 30 families and identified BC-associated candidate genes, most of which were associated with a specific family origin and highlighted the interference with regulation of immunity and DNA damage. The combined approaches provide a nuanced view of BC genetics and offers new opportunities for early diagnosis, risk prediction, and personalized care. Read more in: (i) Brandes, N. et al. (2021) Scientific reports 11, 14901; (ii) Passi, G., et al. (2024) Briefings in Bioinformatics 25 (4), bbae346.

### Biography

Prof. Michal Linial is a leading expert in computational biology and bioinformatics at the Hebrew University of Jerusalem. She directs both experimental and computational research focused on protein evolution, neurobiology, and disease mechanisms. A former director of the Israel Institute for Advanced Studies and head of ELIXIR-Israel, she has published over 150 peer-reviewed articles. Linial is an elected Fellow of the ISCB and has developed key bioinformatics tools like ProtoNet and PANDORA. Her work bridges molecular biology with cutting-edge data science and machine learning.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**O. Topolcan, J. Ferda, J. Molacek, M. Pestova, S. Svobodova, L. Kravec, M. Hora, M. Jirasko, R. Kucera, H. Mikolaskova**

Faculty Hospital and Medical Faculty in Pilsen, Czech Republic

## **Strategic and Evidence-Based Use of Tumor Markers in Oncology: Practical Insights from a Multidisciplinary Clinical Center**

Tumor markers play a pivotal role in contemporary oncology, providing valuable information for cancer diagnosis, prognosis, therapeutic monitoring, and early detection of disease recurrence. However, their clinical utility is highly dependent on appropriate selection, timing, and interpretation within the broader diagnostic and therapeutic framework.

This review summarizes the long-term experience of our multidisciplinary center with the application of tumor markers across a wide spectrum of oncological indications. Emphasis is placed on the strategic integration of markers based on their biological specificity, organ affinity, sensitivity, and predictive value. Rather than relying on single analytes, we advocate for multimarker approaches tailored to the tumor type and clinical scenario. For instance, in lung cancer, combining CYFRA 21-1, NSE, and CEA enhances diagnostic yield, while in colorectal cancer, CEA and CA 19-9 may be complemented by emerging markers for improved prognostication.

We present illustrative case studies demonstrating how rational marker selection contributes to earlier detection of relapse, more accurate assessment of treatment response, and timely therapeutic decision-making. Furthermore, we highlight the importance of individualized longitudinal monitoring, where marker dynamics over time provide insights into tumor biology and treatment efficacy—especially in patients undergoing systemic or targeted therapies.

In our experience, critical interpretation of tumor marker results, when combined with imaging and histological data, significantly improves diagnostic precision and supports personalized oncology care. Importantly, inappropriate or indiscriminate testing may lead to false positives, unnecessary interventions, and increased healthcare costs. Therefore, we stress the need for standardization of analytical methods, adherence to evidence-based guidelines, and ongoing education of clinicians in the rational use of tumor markers.

In conclusion, a structured, clinically contextualized, and multidisciplinary approach to tumor marker utilization can substantially enhance the quality and efficiency of oncological care. It allows for better patient stratification, resource optimization, and contributes to more sustainable cancer management.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

## **Biography**

Prof. Ondřej Topolčan, MD, PhD, is the Head of the Department of Immunochemistry and Biobank at University Hospital Pilsen and Deputy Director of the Biobank at the Faculty of Medicine, Charles University in Prague. He specializes in laboratory medicine and personalized oncology, focusing on the clinical use of tumor markers for cancer diagnosis and patient monitoring. Prof. Topolčan has significantly contributed to advancing biobanking infrastructure and services in Pilsen, supporting research and clinical studies. His work emphasizes individualized cancer treatment strategies across lung, breast, colorectal, and prostate cancers. He is actively involved in improving diagnostic workflows and biomarker analyses to enhance patient care and outcomes.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Prof. Shadi Basurra**

Birmingham City University, UK

## Improving Digital Health Diagnosis and Interpretation with Deep Learning

Many conventional diagnostic tools are often inadequate when it comes to identifying early-stage disease symptoms—particularly in cases such as breast cancer—resulting in delays to timely intervention and treatment. Early detection is essential for accurate prognosis and the formulation of personalised treatment plans. In recent years, artificial intelligence (AI), and more specifically Graph Neural Networks (GNNs), have demonstrated significant promise in structured data analysis for outcome prediction in oncology. This research introduces three novel AI-driven methodologies designed to enhance disease diagnosis and improve predictive accuracy for breast cancer outcomes.

The first proposed approach, AIM-X (Attention-Infused Multimodal Cross-Interaction for X-ray), is a sophisticated diagnostic system that integrates recent advances in computer-aided diagnosis (CAD). AIM-X combines multimodal imaging analysis with automated radiology report generation to support informed clinical decision-making. The system employs attention mechanisms and multiscale feature extraction, complemented by hyperparameter optimisation using a genetic algorithm. These components collectively enhance diagnostic accuracy and the interpretability of AI-generated results. By simultaneously processing both radiological images and associated medical texts, AIM-X demonstrates strong potential not only in diagnostic imaging but also in broader domains such as pathology, cardiology, and other clinical areas. This model underscores how scalable and explainable AI solutions can contribute meaningfully to early detection and precision oncology.

Building on this, the second approach—GraphX-Net—introduces a graph neural network architecture enhanced with Shapley Values to predict cancer recurrence with a high degree of interpretability. In this model, each patient is represented as a node within a graph, and clinical features such as tumour cellularity and hormone therapy status serve as node attributes. By utilising graph convolutional layers in conjunction with Shapley Value analysis, GraphX-Net effectively captures both individual-level clinical characteristics and complex inter-patient relationships. This dual capacity contributes to its superior performance in forecasting the risk of cancer recurrence.

The third method, BG-MBC (BERT-GNN for Metastatic Breast Cancer), focuses on predicting metastatic progression through the analysis of unstructured clinical text, particularly histopathology reports. This approach integrates large language models (LLMs) and GNNs, combining the contextual understanding of BERT-based embeddings with graph-based modelling of patient relationships. BERT is used to extract semantic features from medical texts, while the GNN component captures relational patterns from patient histories. This fusion of natural language processing and graph learning enables the system to provide accurate and interpretable predictions of metastatic breast cancer, reinforcing the value of multi-modal AI in clinical applications.



# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

Together, these three methods contribute to the growing field of AI in medical diagnostics, offering powerful tools for early disease detection, enhanced recurrence prediction, and accurate identification of metastatic conditions. By bridging image analysis, clinical narratives, and relational modelling, this research highlights how advanced AI techniques can transform diagnostic strategies and improve outcomes in oncology.

## Biography

Prof. Shadi Basurra is a Professor of Intelligent Systems with a PhD from the University of Bath, UK, supported by Toshiba and the Yemeni government. He previously worked at Sony Corporation in Japan and has been an academic at Birmingham City University since 2014. He heads the Department of Computer and Data Science and co-founded the Data Analytics and AI (DAAI) research group. Under his leadership, DAAI includes six labs and a team of 55 researchers working on health, sustainability, NLP, and computer vision. He has led or co-led over £8.25M in research projects, with £3.25M as Principal Investigator. Prof. Basurra has published widely and established UKRI and international research partnerships. He leads the Software Engineering Track at BCU's Software House, supporting over 142 businesses. More than 100 companies have benefited from his CPD courses and tailored tech solutions. He has delivered several intelligent products (MVPs), including SmartSketcher and i-Magine Sensor. Currently, he is leading the commercialisation of SmartSketcher, targeting a significant share of the homeowner market. His work bridges academia and industry, with impact spanning research, innovation, and enterprise.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Marcin Śniadecki,<sup>1,2</sup>** , Anna Malitowska,<sup>3</sup> Jarosław Meyer-Szary,<sup>4</sup> Patrycja Kijańska,<sup>1</sup> Abhishek Singla,<sup>1</sup> Ritu Amit Chhabria,<sup>1</sup> Hanaf Alvi,<sup>1</sup> Maria Morawska,<sup>1,2</sup> Amelia Banaszak,<sup>1,2</sup> Olga Kondratowicz,<sup>1,2</sup> Julia Nowakowska,<sup>1,2</sup> Lena Grono,<sup>1</sup> Diana Akhmed,<sup>1</sup> Klaudia Kokot,<sup>1</sup> Maksymilian Grzelak,<sup>1</sup> Konrad Duszyński,<sup>1</sup> Katarzyna Marozik,<sup>1</sup> Patrycja Jaworska,<sup>1</sup> Jakub Majchrzak,<sup>1</sup> Natalia Krupovich,<sup>1</sup> Zuzanna Boyke,<sup>5</sup> Julia Respondek,<sup>6</sup> Oliwia Musielak,<sup>7</sup> Weronika Ciećko,<sup>8</sup> Ewa Bandurska,<sup>8</sup> Jakub Szalek,<sup>9</sup> Paweł Guzik,<sup>10</sup> Martyna Danielkiewicz,<sup>1,2</sup> Patryk Poniewierza,<sup>11</sup> Ewelina Klimik,<sup>12</sup> Cynthia Aristei,<sup>13</sup>; on behalf of Senological Gynecology Working Group

<sup>1</sup>Division of Gynecology and Obstetrics, Department of Gynecology, Obstetrics and Neonatology, Medical University of Gdańsk, Gdańsk, Poland

<sup>2</sup>Outpatient Gynecologic and Senologic Clinic "Wolf", Memorial MD Zofia Garlicka Clinica Femina Centra - Polyclinic of Gynecology and Senology, Gdańsk, Poland

<sup>3</sup>Department of Ethics, Adam Mickiewicz University, Poznań, Poland

<sup>4</sup>Department of Paediatric Cardiology and Congenital Heart Defects, Medical University of Gdańsk, Gdańsk, Poland

<sup>5</sup>Department of Art History, Faculty of History, University of Gdańsk, Gdańsk, Poland

<sup>6</sup>Graphic Design Department, Faculty of Graphic Arts, Academy of Fine Arts in Gdańsk, Gdańsk, Poland

<sup>7</sup>Department of Surgical Oncology, Transplant and General Surgery, University Clinical Center, Gdańsk, Poland

<sup>8</sup>Center for Competence Development, Integrated Care and e-Health, Medical University of Gdańsk, Gdańsk, Poland

<sup>9</sup>Faculty of Social Sciences, Pontifical University of John Paul II in Kraków, Kraków, Poland

<sup>10</sup>Clinical Department of Gynecology and Obstetrics, City Hospital Rzeszów, Rzeszów, Poland

<sup>11</sup>Faculty of Medicine, Łazarski University, Warsaw, Poland

<sup>12</sup>Department of Product Design, Faculty of Design, Strzemiński Academy of Fine Arts in Łódź, Łódź, Poland

<sup>13</sup>Radiation Oncology Section, Department of Medicine and Surgery, University of Perugia and Perugia General Hospital, Sant' Andrea delle Fratte, Perugia

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

## Beyond the image frame: How Italian High Renaissance Paintings Can be Used to Teach Medical Students to Interpret Patient Symptoms?

In breast cancer, the second common cancer in women worldwide, the accurate interpretation of visual information is critically important in the era of “time poverty”, given that diagnosis primarily relies on visual stimuli interpreted by the examiner. The “ARSA Think Tank Meeting” (ARSATTM) on the art of medical diagnosis of breast cancer, endorsed by the Arthur Schopenhauer Research Academy (ARSA) and the Senological Gynecology Working Group (SGWG), and conducted under the auspices of Senological Section of Polish Society of Obstetricians and Gynecologists, represents the first academic session dedicated to slow education and sign interpretation leading to breast cancer diagnosis in young female patients. During the meeting, these topics were discussed in different groups of medical students - three Polish-speaking and one English-speaking, including participants from non-medical fields in some groups. At the meeting, two of the student groups received a methodological introduction to the typology of signs in a Renaissance painting, while the other two did not. Subsequently, all four groups were assigned tasks to draw contemporary young breast cancer patients and to interpret ultrasound images. Finally, the students met real patients and performed breast ultrasound examinations under the guidance of a teacher. Herein, we present how medical students transform signs into meanings, both with and without methodological preparation, and offer recommendations for educating medical students, particularly in breast ultrasound for patients with symptoms suggestive of breast pathology. Adhering to the principle of “Beyond the frame”, medical students have the opportunity to recognize the significance of deliberate and thoughtful reflection, despite the constraints imposed by time poverty.

### Keywords

breast cancer, senology, slow education, diagnosis, Renaissance paintings, interpretation, symptoms, time poverty

### Biography

Marcin Śniadecki, M.D., Ph.D., MBA, specialist in gynecology and obstetrics, senologist, with special interest in gynecological oncology, early diagnosis and treatment of breast cancer patients, ultrasound and art in medicine. Author of numerous studies regarding prophylaxis and diagnosis of gynecological and breast cancers. He is a member of EORTC (Breast Cancer Group) and the Management Board of the Polish Senological Section of Polish Society of Gynecological Oncology. He is a supporter of value-based healthcare and slow medicine philosophy.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**M. Pestova**, I. Zedníková , J. Molacek, S. Svobodova, L. Kravec, M. Karlikova

University Hospital Pilsen and Medical fakulty Pilsen, Charles University Prague, Czech Republic

## HE4: A New Potential Tumor Marker for Early Diagnosis and Prediction of Breast Cancer Progression

### Background

Accurate and early diagnosis of breast cancer (BC) remains critical for effective treatment and improved outcomes. Human epididymal protein 4 (HE4) has emerged as a promising biomarker in various malignancies. This study aimed to evaluate the diagnostic and prognostic potential of HE4, in comparison and combination with CEA, CA 15-3, and CYFRA 21-1, in patients with breast cancer.

### Methods

Serum levels of HE4, CEA, CA 15-3, and CYFRA 21-1 were measured using chemiluminescent and electrochemiluminescent immunoassays in three groups: 80 women with histologically confirmed breast cancer (stage I–IV), 80 women with early-stage BC (stage I–II) prior to surgery, and 80 controls (40 healthy women and 40 with benign breast disease). Receiver operating characteristic (ROC) curves were constructed to assess diagnostic performance of individual and combined markers.

### Results

ROC analysis demonstrated that HE4 had the highest diagnostic sensitivity and specificity among early-stage BC patients prior to surgery. In contrast, CYFRA 21-1 was most effective in detecting disease progression or recurrence during follow-up. The combination of markers significantly improved diagnostic accuracy compared to individual markers alone.

### Conclusions

Tumor markers, particularly HE4 and CYFRA 21-1, represent valuable non-invasive tools for both the early detection and dynamic monitoring of breast cancer. Their integration into clinical practice may refine diagnostic pathways and guide therapeutic decision-making.

### Biography

Dr. Martina Pestová is affiliated with University Hospital Pilsen and the Faculty of Medicine in Pilsen, Charles University, Prague, Czech Republic. Her clinical and research work focuses on breast cancer progression, combining academic insight with hands-on experience in patient care.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



<sup>1</sup> Shu-Chun Liu, <sup>2</sup> De-Wei Lai, <sup>3</sup> Meei-Ling Sheu

<sup>1</sup>Department of Chinese Medicine, Chang Bing Show Chwan Memorial Hospital, Changhua, Taiwan;

Doctoral Program in Translational Medicine, National Chung Hsing University, Taichung, Taiwan; Rong Hsing Research Center, National Chung Hsing University, Taichung, Taiwan

<sup>2</sup>Department of Medical Research, Taichung Veterans General Hospital, Taichung, Taiwan; Experimental Animal Centre, Department of Molecular Biology and Cell Research, Chang Bing Show Chwan Memorial Hospital, Changhua, Taiwan; Department of Pharmacy and Master Program, Tajen University, Pingtung, Taiwan

<sup>3</sup>Institute of Biomedical Sciences, National Chung Hsing University, Taichung, Taiwan; Department of Medical Research, Taichung Veterans General Hospital, Taichung, Taiwan; Rong Hsing Research Center for Translational Medicine, National Chung Hsing University, Taichung, Taiwan

## Immunomodulatory Role of Ginkgolide B in Oral Cancer via the SREBP1/KLK8/CCL22 Pathway

Regulatory T cell (Treg) infiltration is linked to poor prognosis in oral cancer. This study explored the immunomodulatory effect of Ginkgolide B (GB) through the SREBP1/KLK8/CCL22 axis. Bioinformatic analyses of public datasets and tissue arrays revealed that high SREBP1 expression correlated with worse survival and was positively associated with KLK8 and CCL22 levels. Functional assays in SAS, KYSE-510, and TE-1 cells demonstrated that GB suppressed sterol biosynthesis, downregulated SREBP1, inhibited KLK8 promoter activity, reduced CCL22 secretion, and consequently limited Treg migration. In vivo, using an orthotopic MOC-2 model, both GB treatment and SREBP1/KLK8 knockdown significantly suppressed tumor growth, CCL22 expression, and Treg infiltration, whereas pharmacologic activation of SREBP reversed these effects. Collectively, these findings indicate that GB disrupts SREBP1-driven KLK8 transcription, thereby reducing CCL22-mediated Treg recruitment, and highlight GB as a potential immunotherapeutic strategy for oral cancer.

### Keywords

Oral cancer, Ginkgolide B, Sterol regulatory element-binding protein 1, Tregs

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

## **Biography**

Dr. Liu received her degree in Traditional Chinese Medicine from China Medical University, Taiwan, in 2013. She currently serves as a visiting staff member in the Department of Traditional Chinese Medicine at Chang-Bing Show-Chwan Memorial Hospital. She is also a Ph.D. candidate in Translational Medicine at National Chung Hsing University. Her research focuses on the clinical application and development of traditional Chinese medicine. She has published in Phytomedicine, including the article “Attenuation of in vitro and in vivo melanin synthesis using a Chinese herbal medicine through the inhibition of tyrosinase activity.”



# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Essaada Belglaiiaa<sup>1\*</sup>, Nadia Benyahia<sup>2</sup>**

<sup>1</sup> Higher Institute of Nursing Professions and Health Techniques (ISPITS), Beni Mellal 23000, Morocco.

<sup>2</sup> Reference Center for Reproductive Health and Early Detection of Breast and Cervical Cancers, Beni Mellal 23000, Morocco.

## Pyoderma gangrenosum mimicking inflammatory breast cancer: A case report

Pyoderma gangrenosum (PG) is a rare skin disease characterized by neutrophilic inflammation, often associated with systemic pathologies. Although this condition generally affects other areas of the body, it can occasionally manifest in the breast, where it can mimic neoplastic or infectious lesions. A clinical case illustrates this rare presentation: a 68-year-old Moroccan patient, initially referred for suspected breast cancer, presented with painful, rapidly progressing ulcerative-necrotic lesions on the breast with purplish edges. These lesions were accompanied by localized skin involvement on the leg. Histological examination of the breast lesions revealed a neutrophilic infiltrate, suggesting an inflammatory origin. In addition, worsening of symptoms was observed after a breast biopsy, suggesting a pathergy reaction. Further investigations led to a diagnosis of rheumatoid arthritis (RA) associated with systemic lupus erythematosus (SLE), while infectious and tumor assessments were negative. The definitive diagnosis of Pyoderma gangrenosum was confirmed. Combined treatment including corticosteroids, immunosuppressants, and local care was implemented. This case highlights the importance of an accurate differential diagnosis when a breast ulcer is observed, in order to avoid diagnostic errors, prevent inappropriate treatments, and reduce the risk of serious functional and aesthetic consequences for the patient.

### Keywords

Pyoderma gangrenosum, Systemic pathologies, Pathergy, Differential diagnosis, Breast ulcer.

### Biography

Prof. Essaada BELGLAIAA, HDR, PhD, is the deputy director in charge of Scientific Research, Continuing Education and Cooperation in the Higher Institute of Nursing and Health Techniques (ISPITS) of Béni Mellal, Ministry of Health and Social Protection, Morocco. She is a Professor of epidemiology and public health with a PhD from the University of Franche-Comte, Besancon (France) and Ibn Zohr University, Agadir (Morocco). Her research work focuses on cervical cancer and breast cancer (including awareness, screening and diagnosis), HPV vaccination, molecular biology and infectious diseases (HPV, HIV...). Prof. BELGLAIAA has been actively involved in the implementation of the PhD program for nursing students in Morocco.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Marcin Śniadecki<sup>1</sup>** , Maria Ciesielska<sup>2</sup>, Zuzanna Kilińska<sup>1</sup>, Marek Zygmunt<sup>3</sup>, Avi Ohry<sup>4</sup>, Krzysztof Sobczak<sup>5</sup>

<sup>1</sup>Division of Gynecology and Obstetrics, Department of Gynecology, Obstetrics and Neonatology, Medical University of Gdańsk, Poland

<sup>2</sup>Faculty of Medicine, Łazarski University, Warsaw, Poland

<sup>3</sup>Clinic and Polyclinic for Gynaecology and Obstetrics, Greifswald University, Greifswald, Germany

<sup>4</sup>Department of Rehabilitation Medicine, Tel Aviv University, Tel Aviv, Israel

<sup>5</sup>Department of Medical Sociology and Medical Communication, Department of Social Medicine, Medical University of Gdańsk, Gdańsk, Poland

## Colposcopy at 100: Celebrating Innovation Amid Ethical Shadows

At the turn of 2024 and 2025, we celebrated the 100th anniversary of the discovery of colposcopy, a visual diagnostic method that combines screening and treatment of precancerous lesions of the cervix uteri. The colposcope was invented by Hans Hinselmann (1884-1959), who was influential in the unprecedented scale of Germany's national cervical cancer screening program in the 1930s. However, the origins of the use of the colposcope in early diagnosis of cervical cancer relied, at least in part, on medical experiments on inmates in the Auschwitz concentration camp. Contrary to popular belief, these were not pseudo-medical experiments, but research for which there were scientific premises. Another common belief holds that camp medicine is merely a past best forgotten. But is that really the case? The centennial of colposcopy provides an important opportunity to reflect on how science can cast shadows over people. As physicians and medical educators, we have a duty to remember, to remain sensitive, and to stay attentive to the ethical foundations of medical science. The history of the colposcope can serve as an important backdrop for this reflection.

### Keywords

colposcopy, cervical cancer, medical experiments, bioethics, Auschwitz, extermination camps

### Biography

Marcin Śniadecki, M.D., Ph.D., MBA, specialist in gynecology and obstetrics, senologist, with special interest in gynecological oncology, early diagnosis and treatment of breast cancer patients, ultrasound and art in medicine. Author of numerous studies regarding prophylaxis and diagnosis of gynecological and breast cancers. He is a member of EORTC (Breast Cancer Group) and the Management Board of the Polish Senological Section of Polish Society of Gynecological Oncology. He is a supporter of value-based healthcare and slow medicine philosophy.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Essaada Belglaiiaa**, <sup>1,2</sup>, Jean-Luc Prétet, <sup>2,3</sup> David Guenat, <sup>2,3</sup> Christiane Mougin<sup>2,3</sup>

<sup>1</sup> Service des soins infirmiers, Institut Supérieur des Professions Infirmières et Techniques de Santé, Laâyoune, Morocco

<sup>2</sup> EA 3181, LabEx LipSTIC ANR-11-LABX-0021, Université Bourgogne Franche- Comté, Besançon, France

<sup>3</sup> Centre National de Référence Papillomavirus, CHU de Besançon, Besançon, France

## Awareness toward cervical cancer among HIV-positive Moroccan women: a cross-sectional study

**Background:** Cervical cancer remains a disease of significant concern to women's health. This study aims to explore the level of awareness regarding cervical cancer among HIV-infected Moroccan women in Laâyoune city, Morocco. **Methods:** A cross-sectional study was conducted, from April to June 2017, among 123 HIV-positive women attending an HIV treatment centre at the Hospital of Moulay Hassan Ben Elmehdi in Laâyoune city, Morocco. We used a knowledge test guided by a questionnaire to collect information regarding cervical cancer, its risk factors and its prevention. **Results:** A total of 115 respondents to the questionnaire. The mean age was 34.9 years ( $\pm 10.2$ ). Few women (20%) had heard about cervical cancer and its screening, the majority (17.4%) having received information from mass media. The vast majority (79.1%) of respondents did not know cervical cancer risk factors, and 80.8% did not know any symptoms of cervical cancer. Only 13% had undergone a Pap smear test. The main reason for not seeking Pap smear was the absence of symptoms (47%). **Conclusion:** There is an over-riding need to implement and strengthen health education programmes on cervical cancer and its prevention in HIV treatment centres in Morocco.

### Keywords

Cervical cancer, HIV, Awareness, HIV-positive women, Morocco

### Biography

Prof. Essaada BELGLAIAA, HDR, PhD, is the deputy director in charge of Scientific Research, Continuing Education and Cooperation in the Higher Institute of Nursing and Health Techniques (ISPITS) of Béni Mellal, Ministry of Health and Social Protection, Morocco. She is a Professor of epidemiology and public health with a PhD from the University of Franche-Comte, Besancon (France) and Ibn Zohr University, Agadir (Morocco). Her research work focuses on cervical cancer and breast cancer (including awareness, screening and diagnosis), HPV vaccination, molecular biology and infectious diseases (HPV, HIV...). Prof. BELGLAIAA has been actively involved in the implementation of the PhD program for nursing students in Morocco.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**I Zemni**, A Maatouk, M Kacem, W Dhouib, C Bennasrallah, H Abroug, M Ben Fredj, I Bouanene, A Sriha.

Epidemiology and Preventive Medicine, Monastir University Hospital, Monastir, Tunisia

## Population-Based Analysis of Breast Cancer Incidence and Survival in Monastir, Tunisia

### Introduction

Breast cancer is a major public health problem worldwide and the leading cause of cancer deaths among females. In Tunisia, its incidence continues to rise. This study aimed to determine the incidence rates of breast cancer in Monastir, analyze trends with predictions until 2030, and describe 5-year survival rates.

### Methods

This descriptive study included all female patients diagnosed with breast cancer in Monastir between 2002 and 2013. Data were collected from the regional cancer registry, and cancer sites were classified according to the 10th version of the International Statistical Classification of Diseases (ICD-10). Trends and predictions of incidence rates until 2030 were estimated using Poisson linear regression. Patients were followed over time to determine death status, and 5-year survival rates were calculated.

### Results

A total of 1,028 cases of female breast cancer were recorded. The median age of patients was 49 years (IQR: 41–59), ranging from 16 to 93 years. The age-standardized incidence rate (ASR) was 39.12 per 100,000 inhabitants. It increased significantly with an annual percent change (APC) of 8.4% (95% CI: 4.9–11.9). Predictions indicated that the ASR could reach 108.77 (95% CI: 57.13–209.10) per 100,000 inhabitants by 2030. The overall 5-year survival rate for breast cancer was 63.8% (95% CI: 58.8–67.7), with stable trends observed.

### Conclusion

The increasing incidence of breast cancer highlights a serious public health concern in Monastir, Tunisia. Strengthening preventive measures and early detection strategies is crucial, while monitoring survival rates can help evaluate the effectiveness of treatment and care.

### Biography

Imen Zemni is an Associate Professor in Preventive and Community Medicine at the Faculty of Medicine of Monastir and the University Hospital of Monastir (CHU Monastir), Tunisia. Her academic and research work focuses on epidemiology, cancer prevention, health education, communicable diseases, and medical information systems.

Her scientific interests include improving population health outcomes, strengthening disease surveillance, and promoting evidence-based prevention practices.

Dr. Zemni is actively involved in academic training, epidemiological studies, and collaborative research projects aimed at advancing public health in Tunisia and beyond.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Aili Saiding**

The Thyroid and Breast Surgery Department of Guangyuan Central Hospital, Guangyuan City, Sichuan Province, China

## Microwave ablation treatment of non-lactating mastitis

Non-lactation mastitis (NPM) is a group of non-lactation, unknown etiology, benign, non-specific inflammatory diseases, including ductal expansion disease (mammary duct ectasia, MDE) / periductal mastitis (PDM), granulomatous lobular mastitis (GLM). The incidence of NPM is not high worldwide, but in recent years, the incidence of NPM in China has shown an obvious increasing trend, so it has attracted wide attention.

NPM in the clinical process often presents the characteristics of "benign disease, malignant behavior", and there is no clinical specification for its causes of treatment, and traditional open surgery with trauma, postoperative scar obvious, appearance morphology changes, and many other shortcomings, and conventional antibiotic treatment effect, still easy to relapse after surgery, abscess repeatedly rupture sinus canal, fistula or ulcer, young patients, especially female patients are difficult to accept.

In recent years, microwave ablation technology has gradually entered the public view, and has been widely used in thyroid diseases and benign breast diseases. Committed to cure the disease, relieve patients with physical and mental pain, improve the quality of life, we for nearly four years of NPM patients, adopted different from the traditional treatment, focusing on the rapid development of microwave ablation technology in recent years, combined with control inflammation stronger glucocorticoids, successfully cured 79 female NPM patients and 1 male NPM patients (late follow-up no recurrence cases), thus gradually find suitable for the treatment of NPM patients in the region. It is worth noting that the hormone treatment cycle of patients with different stages or disease severity is not the same. In one cycle of eight weeks and gradually reducing the drug dose, bi-weekly breast ultrasound and clinical evaluation are the key to grasp the timing of microwave ablation technology.

### Keywords

NPM, Microwave ablation technology, Glucocorticoid

### Biography

Dr. Aili Saiding, Graduated from the Department of Clinical Medicine at Shanghai Medical University in 2001, obtained a Master's degree in Oncology in 2008, and a MD in Surgery in 2013. Studied at Shanghai Cancer Hospital and Essen University Affiliated Hospital in Germany in 2013 and 2016, respectively, currently the Director of the Thyroid and Breast Surgery Department at Guangyuan Central Hospital. His main research direction is the diagnosis and comprehensive treatment of benign and malignant breast and thyroid diseases. Having undertaken clinical teaching tasks for many years, participated in the editing of two monographs, published 30 papers in domestic and foreign journals, and contributed to the compilation of the latest version of the national expert consensus on microwave ablation therapy for benign breast nodules.



# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



**Kedar N Prasad**

Engage Global Inc. Utah, USA

## **High Doses of Multiple Antioxidants Kill Cancer Cells and Enhance Growth-Inhibitory Effects of X-Irradiation and Chemotherapeutic Agents on Cancer Cells Irrespective of Type and Stage while Protecting Normal cells.**

Chemotherapy and radiation therapy have increased 5-year survival for most cancer type; however, toxicity including diarrhea, vomiting, and fatigue occurs during treatment. In addition, the risk of recurrence of primary tumor and second primary cancers, and non-neoplastic diseases exists. To address above problems, FLASH radiation therapy which delivers radiation at a dose rate of 40 Gy/sec compared to a dose rate of 0.01 Gy/sec of conventional radiation therapy was developed. It protected normal tissue without changing tumor repose rate. Therefore, a new approach is needed. We showed that high doses of vitamin C or vitamin E succinate killed cancer cells irrespective of type and enhanced the effects of x-irradiation on cancer cells, while protecting or no effect on normal cells. While searching for the mechanisms of high doses of antioxidants, we found that cancer cells require glucose and glutamine for their survival. Studies showed that high doses of some individual antioxidant blocked the uptake and metabolism of glucose while others prevented the uptake and metabolism of glutamine. Therefore, we proposed that high doses of multiple antioxidants would kill cancer cells irrespective of type, stage, and sensitivity of treatment because they all need glucose and glutamine for their survival. High doses of multiple antioxidants when administer 2-4 weeks before chemo/radiation therapy or FLASH radiation therapy would markedly improve their effectiveness on cancer cells, while protecting or not affecting normal cells. Since intestinal dysbiosis contributes to the initiation and progression of cancers and reduces the effectiveness of chemo/radiation therapy, inclusion of probiotics with prebiotics with high doses of antioxidants is recommended. Limited human experience supports the proposed suggestion for improving cancer treatment.

### **Keywords**

Cancer, high-dose antioxidants, glucose, glutamine, Treatment

### **Biography**

Dr Prasad graduated from the University of Iowa, Post-doctoral training at the Brookhaven National laboratory, and joined the University of Colorado Medical School for teaching and research.

**Discoveries:** An elevation of cyclic AMP induced terminal differentiation in neuroblastoma cells in culture. Butyric acid and vitamin E succinate are potent anti-cancer agent. High dose antioxidants kill cancer cells without affecting normal cells.

**Honors:** In 1982, he was invited by the Nobel Prize Committee to nominate a candidate for the Nobel Prize in Medicine. In 2017, he was invited to become a member of the Royal Society of Medicine, London



# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER



Lekshmi R. Nath<sup>1,2</sup>, Chenicheri K. Keerthana<sup>1</sup>, Sreekumar U. Aiswarya<sup>1,4,5</sup>, Tennyson P. Rayginia<sup>1,3</sup>, Sadiq C. Shifana<sup>3</sup>, Ravi Shankar Lankalapalli<sup>4</sup> and **Ruby John Anto**<sup>1, 3, 5</sup>

<sup>1</sup>Division of Cancer Research, Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram-695014, Kerala, India;

<sup>2</sup>Department of Pharmacognosy, Amrita School of Pharmacy, Amrita Vishwa Vidyapeetham, Kochi, India

<sup>3</sup>Molecular Bioassay Laboratory, Institute of Advanced Virology, Thiruvananthapuram. 695317, Kerala, India

<sup>4</sup>Chemical Sciences and Technology Division, CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram 695019, India;

<sup>5</sup>Centre of Excellence in Nutraceuticals, KSCSTE, Government of Kerala 695317, Kerala, India

## Pre-clinical evaluation of kaempferide, a flavonoid from *Chromolaena odorata*, as a potential drug candidate against cervical cancer

Despite the advancement in HPV prevention strategies, cervical cancer is still a leading cause of cancer death. We isolated and identified kaempferide in our lab from *Chromolaena odorata*, commonly known as Siam weed. Among the cancer cell lines of various origins, the cervical cancer cell line, HeLa was the most sensitive to kaempferide. Cytotoxic potential of kaempferide was assessed against the cervical cancer cell lines, HeLa and SiHa, which possess HPV-18 and -16 integrated genome respectively. Kaempferide led to a strong induction of apoptosis in HeLa and SiHa cells while being non-toxic to the rapidly dividing normal human fibroblasts. Acute and chronic toxicity studies conducted in vivo proved that the compound is pharmacologically safe. Anti-proliferative and anti-migratory effects were assessed through colony formation and wound healing assays. Gene and protein expression changes were measured using qRT-PCR and Western blotting. Human cervical cancer xenograft model was raised in NOD-SCID mice using HeLa cells. The mouse xenograft tissues were subjected to histopathological analysis, immunohistochemistry and TUNEL assay to confirm apoptotic mode of cell death.

Our study reveals the antioncogenic potential of kaempferide, which down-regulates expression of the E6 and E7 oncoproteins of HPV-18 and HPV-16 and up-regulates the tumor suppressors, p53 and pRb, leading to significant tumor growth reduction. This is the first report depicting kaempferide as an inhibitor of HPV oncoproteins, positioning it as a potential drug candidate for cervical cancer. The present study confirms the therapeutic efficacy of kaempferide against cervical cancer using in vivo models and explores its mechanism of action.

# 6TH WORLD FORUM ON BREAST AND CERVICAL CANCER

**Keywords**

Kaempferide, *Chromolaena odorata*, cervical cancer, HPV oncoproteins, E6, E7.

**Biography**

Dr. Ruby John Anto took her PhD from Amala Cancer Research Centre, Thrissur and did her post-doctoral studies at Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram. She started her career as Scientist C at RGCB and later served as a visiting scientist at M.D. Anderson Cancer Center, Houston, USA. After joining back, she was part of the Cancer Research Program of RGCB till her retirement from RGCB as Scientist G in April, 2023. Currently Dr. Anto is serving as the Chief Scientist at the Centre of Excellence in Nutraceuticals, KSCSTE, Government of Kerala, and as an Honorary Scientist at the Institute of Advanced Virology, Thonakkal, Thiruvananthapuram. Her research focuses on bioprospecting for natural products having therapeutic potential against cancer, inflammatory disorders and other lifestyle diseases. Currently she is also investigating the viral etiology of different cancers and evaluating the efficacy of natural products in regulating viral carcinogenesis. She is a recipient of National Woman Bio-Scientist Award, from Department of Biotechnology, Govt. of India and Keystone Symposia Global Health award by Bill & Melinda Gates Foundation. Dr. Anto is a Fellow of National Academy of Sciences, India and Kerala academy of Sciences. She is an editorial board member in several scientific journals and possesses National as well as International research collaborations. She is a reviewer of several reputed International journals and National funding agencies. Her work has been published in several reputed peer-reviewed journals. She also holds National and International patents to her credit. Dr. Ruby has more than 7500 citations and has an H-index of 41 from around 70 International peer-reviewed research publications, in high impact factor journals. Her team has isolated Uttroside B, a compound having exceptional efficacy against liver cancer. Her invention on the therapeutic efficacy of uttroside B, which received 'Orphan drug' designation against liver cancer by the US FDA, has been granted patents from the US, Canada, Europe, South Korea and Japan and the technology has been transferred to the multinational company, Q Biomed.

**WE WISH TO SEE YOU AGAIN AT**

**Barcelona, Spain**

**November-2026**

**For more details:**

**Email: [director@urforum.org](mailto:director@urforum.org)**

