

## Breast Cancer Congress 2017



6<sup>th</sup> World Congress on

# BREAST CANCER & THERAPY

October 16-18, 2017 | San Francisco, USA

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## Scientific Tracks & Abstracts

Day 1

6<sup>th</sup> World Congress on

# BREAST CANCER & THERAPY

October 16-18, 2017 | San Francisco, USA

## Idiopathic granulomatous mastitis mimicking inflammatory breast carcinoma: What are the odds?

Bilawal Ahmed, B. Zulfiqar, U. Appalaneni, A. Hassan, P. Boddu and A. Carey  
University of Missouri-Columbia, USA

**Background:** While inflammatory breast cancer is rare, idiopathic granulomatous mastitis is more uncommon. We hereby present a very rare case of granulomatous mastitis which thought to be inflammatory breast cancer.

**Case:** A 27-year-old Hispanic woman presented with a breast lump, fever, joint pain, and a rash over her anterior shins. Since 1 one month of presentation she had noticed a breast lump which was slowly increasing in size. She was a mother of 2 children and had last breastfed 3 years ago. She denied any trauma to the breast or any nipple discharge. In the week prior to admission, the patient also began to experience fever and joint pain, most severely in her left knee. During this time, she also developed multiple tender lesions over her lower extremities. On physical examination, patient was noted to have a 7.5 cm indurated mass over the right upper quadrant of her right breast, with overlying fluid and ecchymosis, no nipple discharge or retraction and no axillary lymphadenopathy. The patient had multiple tender erythematous nodules measuring 1–2 cm in diameter over her anterior shins in addition to one larger lesion measuring 5 cm on her right lateral thigh. The patient had mild effusion of the left knee with tenderness to palpation of the popliteal fossa and significant pain with both passive and active range of motion of her left knee. On admission, she was febrile, tachycardiac and distressed. Laboratory work revealed leukocytosis of 12.8 (87% neutrophils, 7% lymphocytes). Furthermore, inflammatory and autoimmune work up showed elevated CRP 12.1 and ESR 77, a procalcitonin level <0.05. Investigations for HIV, RPR, Histoplasma urine antigen, Group A Streptococcus, antinuclear antibody, rheumatoid factor, and anti CCP antibody were negative. Quantiferon Gold testing was indeterminate. In regards to her left knee swelling, a lower venous duplex study showed no evidence of DVT but did find a likely Baker's cyst measuring 3–4 cm in the left popliteal fossa. Moreover, breast ultrasound and an ultrasound guided core needle biopsy confirmed findings of granulomatous mastitis with some neutrophilic infiltrate. Patient had been treated empirically with IV vancomycin until the diagnosis was confirmed. Following diagnosis, the patient was started on corticosteroids after which she improved clinically and was discharged on 6 weeks of steroid taper.

### Biography

Bilawal Ahmed MD is Hematology/Oncology fellow from University of Missouri-Columbia. His research interests include inflammatory breast cancer and axillary lymphadenopathy.

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## Stress and patients having breast oncological surgery

**Farzin Goravanchi**

MD Anderson Cancer Center, USA

Breast cancer surgery is associated with high stress. The recognition of stress and management of its effects on patient recovery will be presented. 1- Focus our efforts on patient risk identification, 2- Patient education, 3- Optimization of patient cardiovascular function status, 4- Standardize of perioperative management of the patients (currently many types of anesthetics and techniques of post operative management are used), 5- Clinical data capture (perioperative complications, surveys to quantify symptom burden, functional recovery, develop and capture medical readiness for discharge, cancer recurrence and survival information). 6- cost of care measures. 7- embrace new improved techniques and technologies. Paravertebral block as an anesthetic technique will be introduced and its peri-operative effects will be introduced in stress reduction. Recognition and management of stress may lead to reduction of postoperative complications, minimize symptom burden, improve functional recovery, improve long term outcomes, and improve oncological outcomes.

### Biography

Farzin Goravanchi is an Anesthesiologist, Medical Director and Section Chief at MD Anderson Cancer Center Outpatient Surgical Center. He worked on breast surgery pain management, multi disciplinary surgical pathways addressing stress as well as long term patient management.

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## Chemotherapy with anti-cancer drugs specific to acidic nests

**Hiroshi Kobayashi**

Chiba University, Japan

It was found more than 80 years ago that solid cancer nests are acidified, but *in vitro* studies under acidic conditions had not been focused for a long time. We started *in vitro* experiments with mammalian cells under acidic conditions in 1996. After the protocol for culturing cancer cells in acidic medium had been established, the anti-cancer efficacy of four drugs; lovastatin, cantharidin, manumycin A and ionomycin, were found to increase dramatically at acidic pH. In the case of statins, no serious side effects, such as dysfunction of immune system, pain, diarrhea, nausea, and hair loss, have been reported. These results suggest that these drugs are specific to acidic nests with less effects on normal tissues. In addition to these drugs, many other anti-cancer drugs, specific to acidic nests could be exploited in future, because approximately 700 genes were found to express at a higher level under acidic conditions and such genes may be potent targets for anti-cancer drugs specific to acidic nests. On the basis of our data obtained from *in vitro* studies, clinical usages of anti-cancer drugs specific to acidic nests are discussed.

### Biography

Hiroshi Kobayashi received his PhD in Biochemistry from the University of Tokyo in 1974. After his Post-doctoral training at Colorado University Medical Center, he started to study adaptation strategies of microorganisms to acidic environments at Chiba University in 1978. His research was focused on mammalian cell functions under acidic conditions from 1996 at Graduate School of Pharmaceutical Sciences, Chiba University. He retired in March 2012 and is a presently Professor Emeritus at Chiba University after his retirement. He works as an Associate Editor of International Immunopharmacology published by Elsevier BV from 2014.

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## Pathologic assessment of breast core biopsies: Limitations and Pitfalls

**Laura Spruill**

Medical University of South Carolina, USA

Improved diagnostic imaging, combined with demand for minimally invasive procedures and ever more bold interventionalists, often leave the diagnostic pathologist with small core biopsies on which to assign life-altering diagnoses. Breast pathology can be particularly treacherous because not only is there potential diagnostic overlap between benign and malignant entities, the element of patient driven care has the added variable of surgical choice in which bilateral mastectomy can be treatment for minimal disease. The discussion herein will focus on benign breast disease and the diagnostic difficulties that can result in misdiagnosis.

### Biography

Spruill completed her MD and PhD degree at the Medical University of South Carolina in 2008 followed by anatomic and clinical pathology residency and two years of surgical pathology fellowship, one year with a focus on subspecialty gynecologic pathology. She currently practices pathology at the Medical University of South Carolina with focuses in Breast, Genitourinary and Gynecologic Surgical Pathology.

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## Harnessing benefits from targeting tumor associated carbohydrate antigens

**Thomas Kieber-Emmons**

University of Arkansas for Medical Sciences, USA

Integrating additive or synergistic antitumor effects that focus on distinct elements of tumor biology are the most rational of strategies for cancer treatment. The real challenge is to define what elements of tumor biology make the most sense to be targeted. Signal transduction (pathways) can define therapeutic strategies and approaches that might be tailored to harness benefit from sustained immunity much like that observed from natural antibodies involved in immune surveillance mechanisms. Tumor Associated Carbohydrate Antigens (TACAs) are pan-targets on tumor cells because they play roles in initiation and metastases of cancer, and considered as common targets shared by many tumor types, and regulating a network of signaling pathways associated with cell survival. Strategies that target TACAs therefore have potential benefit as cell death therapies. We have been developing an active immunization strategy targeting TACAs using carbohydrate mimetic peptides (CMP) designed as pan-immunogens. One CMP called P10s was computer designed to induce anti-GD2 and anti-LeY antibodies with the intent of inducing multiple sets of antibodies reactive with multiple TACAs when immunizing with a single agent. We have completed a Phase I clinical trial in breast cancer with a CMP, showing that this designed CMP can induce proapoptotic antibodies in humans that can sensitize tumor cells to chemotherapeutics. We have progressed to a Phase II trial in the neoadjuvant setting where we observe tumor shrinkage in combination therapy.

### Biography

Thomas Kieber-Emmons is a Professor of Pathology, is Co-Leader of the Therapeutic Sciences Program at the Winthrop P Rockefeller Cancer Institute and holds the Josetta Wilkins Endowed Chair in Breast Cancer Research. He obtained his PhD in Biophysics and Molecular Immunology at the Roswell Park Cancer Institute applying structural immunology design principles to develop antibody based immunogens. He is known for his work on developing carbohydrate mimetic peptides (CMPs) as vaccines in both the cancer and pathogen areas and is an acknowledged pioneer in this field. His work reflects one of the very true bench-to-bedside initiatives as a CMP immunogen is in several Phase 2 clinical trials.

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## Survival is better after breast conserving therapy than mastectomy for early stage breast cancer: A registry based follow-up study of Norwegian Women primary operated between 1998 and 2008

**Olaf Johan Hartmann-Johnsen**  
University of Oslo, Norway

**Background & Aim:** Breast conserving therapy (BCT) and Mastectomy have been considered to have similar long-time survival. Two register studies published in year 2013 and 2014 from the United States showed better survival among women undergoing BCT compared to Mastectomy. The purpose of this study was to compare survival after BCT and Mastectomy for women with early-stage breast cancer in Norway.

**Methods:** Women with invasive early stage breast cancer (1998-2008) where BCT and Mastectomy were considered as equally beneficial treatments were included, a total of 13,015 women. Surgery was divided in two main cohorts (Primary BCT, Primary Mastectomy) and five sub cohorts. Analyses were stratified into T1N0M0, T2N0M0, T1N1M0, T2N1M0 and age groups (< 50, 50-69, ≥ 70) Overall survival and Breast cancer-specific survival (BCSS) were calculated in life tables, hazard ratios by Cox regression, and sensitivity analyses were performed.

**Conclusion:** The study corroborates the findings of two studies from the United States, showing better survival for women undergoing BCT compared with Mastectomy. The purpose of this lecture will be to present this study and to discuss the impact of this and similar studies regarding recommendation on surgery.

### Biography

Olaf Johan Hartmann-Johnsen is Breast and Endocrine Surgeon at Kalnes hospital. He is working part time as PhD student with affiliation to the Cancer Registry of Norway. His PhD study is based on registry data.

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## Evaluation of immunohistochemical staining of securin and Ki-67 in invasive breast carcinoma using semi-quantitative method and immunoratio®: A comparative study

Iman Mamdouh Talaat, Nagwa Youssef Oweiss, Nada Mahmoud Soliman Yakout and Abbas Mohammed Omar  
Alexandria University, Egypt

Pituitary Derived Tumour-Transforming Growth Protein (PTTG) (Securin) plays critical role in cell cycle and overexpression is associated with chromosomal instability and poor clinical outcome. Securin and Ki-67 immunohistochemical staining was performed on tissue microarray sections representative of 145 patients diagnosed with invasive breast carcinoma from 2005 to 2011. Semi-quantitative methods as well as ImmunoRatio® (an open source plugin within ImageJ software for offline image analysis) were used for immunostaining assessment. Only 118 cases had representative tissue cores out of 145 cases. The 118 cases were categorized into 2 groups according to their clinical outcome; the first group (G1) (n=77) comprised patients who were disease-free while the second group (G2) (n=41) included patients with recurrence and/or metastasis at the end of 24 months follow up duration. Lymphovascular invasion, perinodal fat infiltration, nodal status, ER status, HER-2 status and molecular subtypes showed risk association with clinical outcome ( $p(\text{MC})=0.005^*$ ,  $p=0.004^*$ ,  $p(\text{MC})=0.001^*$ ,  $p=0.044^*$ ,  $p=0.025^*$ ,  $p(\text{MC})=0.005^*$ ) using chi-square test. Both securin and Ki-7 labelling indices (LIs) obtained by visual counting were significantly higher in the second group ( $p=0.006^*$ ). While only securin LIs acquired by image analysis were significant. Cut off points for the tested markers were identified using Receiver Operator characteristics (ROC) curves. Areas under curve (AUCs) were compared for these methods of assessment. Securin assessment by visual counting was the most accurate (AUC=0.775) in identifying patients who will likely suffer from recurrence or distant metastasis. The present results suggest that securin may have superior value to ki-67 in identifying invasive breast carcinoma patients with poor clinical outcome.

### Biography

Iman Mamdouh Talaat is working in Alexandria University in Egypt. Her research interest includes Invasive breast carcinoma, breast cancer therapies.

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## The Use of “NEWSTART” as an innovative therapeutic approach in breast cancer

**Lydia Andrews**

Oakwood University, USA

Breast Cancer is not a death sentence. There are many survivors of this condition who attribute their longevity to a radical change in lifestyle. After diagnosing someone with breast cancer the oncologist outlines the conventional treatment regimen which includes surgery, chemotherapy and radiation. This treatment regimen can be combined with another therapeutic approach which is directly linked to a change in one's lifestyle. This lifestyle change can be accomplished using “NEWSTART” The acronym stands for Nutrition, Exercise, Water, Sunshine, Temperance, Air, Rest, Trust in Divine Power. Many lifestyle centers which can be found throughout the United States conduct programs using the Newstart model of treatment for various medical conditions including cancer. As a breast cancer survivor I spent two weeks at a lifestyle center after breast surgery and will be willing to recommend this innovative therapy to anyone who will be willing to adopt a different lifestyle after breast cancer diagnosis. This paper will describe the NEWSTART model of treatment and its effectiveness on breast cancer survival.

### Biography

Andrews is a wife and mother of 3 adult children. Her daughter is in elementary education and her two sons are physicians. She is a grandmother of 4 boys, writes for a women's devotional and nursing journals, is a prayer warrior and is active in her church and community. She is a member of Sigma Theta Tau, American College of Nurse Midwives, International Professional Nurses and the Association of Black Adventist Nurses.

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## Pancreatic enzymes, autonomic physiology, and cancer

**Linda L Isaacs**

Vanderbilt University School of Medicine, USA

More than a century ago, the embryologist Dr. John Beard noted the similarity of cancer cells to the trophoblast, and speculated that cancer originates from wayward trophoblast cells that had the same function as what we now call stem cells. He theorized that pancreatic proteolytic enzymes regulate the growth and maturation of trophoblast cells and could also act against cancer. Since Dr. Beard's time, some practitioners have used pancreatic enzymes against cancer with success. In her lecture, the author will review this history, and describe case reports of patients successfully treated with this form of treatment. As part of a comprehensive nutritional program, these patients also followed a diet and took nutritional supplementation believed to down regulate the sympathetic nervous system, which the author will also discuss.

### Biography

Linda L Isaacs is graduated from Vanderbilt University School of Medicine and is certified by the American Board of Internal Medicine. She has written papers published in the peer-reviewed journals *Nutrition and Cancer* and *Alternative Therapies in Health and Medicine*, and has served as a reviewer for *Alternative Therapies in Health and Medicine*. She is the co-author, with the late Dr. Nicholas Gonzalez, of the book *The Trophoblast and the Origins of Cancer*.

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## Peri-operative takotsubo cardiomyopathy: Are breast cancer patients at higher risk?

January Tsai, Jeff Cerny, Spencer Kee, Farzin Goravanchi, Alicia Kowalski and Elizabeth Rebello  
MD Anderson Cancer Center, USA

Stressful events (ie surgical intervention) are known to be associated with physiologic insults. Takotsubo Cardiomyopathy (TC) is a reversible, stress-induced, non-ischemic cardiomyopathy associated with temporary weakness of the myocardium and midventricular or apical ballooning. Angina, ST abnormalities, elevated troponins, ventricular asynergy, congestive heart failure (CHF), and decreased ejection fraction (EF) are all components of TC. The unique finding is that they occur on the absence of occlusive coronary artery disease (CAD). In this case presentation with institutional review board (IRB) approval we report a case of post-operative cardiac symptoms that all resulted in a diagnosis of TC, and identify the pathology associated with the condition. The etiology of TC is unclear. However, evidence points to activation of the sympathetic nervous system: patients are found to have high levels of circulating catecholamines, up to 7-34 times the normal value, compared to 2-3 times the normal level for patients experiencing acute MI. In this case presentation with institutional review board (IRB) approval we report a case of post-operative cardiac symptoms that resulted in a diagnosis of TC, and we identify the pathology associated with the condition.

### Biography

January Tsai, MD obtained her undergraduate degree from the University of Texas in Austin, with Honors, and her MD from University of Michigan Medical School in Ann Arbor, Michigan. After completing Anesthesiology residency at the University of Texas Health Science Center in Houston, Texas, Dr. Tsai completed a Cardiothoracic Anesthesia Fellowship at Texas Heart Institute. She has dedicated her entire career to the patients in the Texas Medical Center. She serves as the Departmental Liaison to the MD Anderson Women & Diversity Inclusion Council. She has lectured nationally and internationally, and has published more than 30 papers in peer reviewed journals.

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## A randomised controlled trial of the efficacy of a controlled compression garment versus compressive bandaging in the immediate postoperative period after breast cancer - conserving surgery

**Carmen Delgado Jiménez**  
Universitary Valme Hospital, Spain

**Objectives:** To compare the overall and individual incidence of postoperative complications, comfort and quality of life resulting from the use of compressive bandaging versus a specific controlled compression garment.

**Patients and Method:** A multicentric randomised controlled trial was conducted in 198 patients distributed in 2 groups: bandaging (n = 88) and compression garment (n = 99). Variables related to immediate postoperative complications and satisfaction with quality of life were collected. Changes in the variables were compared in the 2 groups during the first postoperative month. Results: The incidence of total complications was significantly lower with the compression

**Garment:** 7 days (p = 0.032) and 15 days (p = 0.009). Pain was significantly reduced with the

**Compression Garment:** 7 days (p = 0.002) and 15 days (p = 0.012). The incidence of skin injury was also significantly reduced: 0-2% with the compression garment versus 35% with bandaging (p < 0.0005). Significant differences were found in quality of life in favour of the use of the compression garment (p < 0.0005).

**Conclusions:** The use of a specific controlled compression garment in the immediate postoperative period after breast cancer-conserving surgery reduces the likelihood of postoperative complications from 32% to 15% and enhanced efficacy, safety, and patient comfort compared with the usual compressive dressing

### Biography

Carmen Delgado has completed her PhD at the age of 24 years in Seville University (Spain) and postdoctoral studies at the age of 29 years also in Seville University School of Medicine. Master in Breast Pathology. She is the director of Breast Cancer Unit in Universitary Valme Hospital, Seville, Spain. She has been Director of the Universitary Valme Hospital during 8 years. She has published more than 30 papers in reputed journals and has extensive in teaching and research experience.

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## Triple negative breast cancer has worse overall survival and cause-specific survival than non-triple negative breast cancer

**Xiaoxian (Bill) Li**  
Emory University, USA

The current American Joint Committee on Cancer (AJCC) staging manual uses tumor size, lymph node and metastatic status to stage breast cancer across different subtypes. We examined the prognosis of triple negative breast cancer (TNBC) vs. non-TNBC within the same stages and sub-stages to evaluate whether TNBC had worse prognosis than non-TNBC. We reviewed the National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) data and identified 158,358 patients diagnosed with breast cancer from 2010 to 2012. The overall survival (OS) time and breast cancer cause-specific survival time were compared between patients with TNBC and non-TNBC in each stage and sub-stages. The results were validated using a dataset of 2049 patients with longer follow-up from our institution. Compared with patients with non-TNBC, patients with TNBC had worse OS and breast cancer cause-specific survival time in every stage and sub-stage in univariate and multivariate analyses adjusting for age, race, tumor grade and surgery and radiation treatments in the SEER data. The worse OS time in patients with TNBC was validated in our institutional dataset. Patients with TNBC have worse survival than patients with non-TNBC. The new AJCC staging manual should consider breast cancer biomarker information.

### Biography

Xiaoxian (Bill) Li has completed his MD and PhD degrees and Oncological and Breast Pathology Fellowship from MD Anderson Cancer Center. He is the Associate Director of Glenn Family Breast Center, Winship Cancer Institute, and Assistant Professor of the Department of Pathology and Laboratory Medicine, Emory University. He has published more than 35 papers in reputed journals.

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## Video Presentation

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## Breathing massage undergarment for breast patient

**Mohammad Tariq Qureshi**

College of Textile Engineering - SFDAC, Pakistan

Breathing massage under garment i-e brassier having pad comprising of madar fiber worked just like physiotherapists locally and enhance body itself to develop the immunity against breast disease for breast patient. Brassier cup size design is main problem for garment design industry due to various factors like breast body weight, size and shape along with body weight, different physical activities of body like sitting, bending, walking, running etc. Design (likely bullet bra) with four flexible strips toward nipple connect with shoulder and abdomen diaphragmic stretchable belts. Volume of pyramid conical type cup calculated with the diameter of cup by adding percentage ratio of breast weight/mass i-e 5% . General tables of the bra sizes of two standards i-e US & UK considered for this design.

### Biography

Mohammad tariq Qureshi, has MPhil Organic Chemistry (GCUF) from College of Textile Engineering, SFDAC and his interests include innovative approaches to Breast cancer, physiotherapy and textile designing.

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## Use of clinicopathologic tumor characteristics to predict results of Oncotype DX 21-gene breast cancer assay: A review of current nomograms

**Amila Orucevic**

University of Tennessee, USA

The newest version of NCCN guidelines (1.2017) endorses consideration of Oncotype DX 21-gene breast cancer assay results in decision making for administration of systemic adjuvant chemotherapy treatment of hormone receptor-positive, *HER2*-negative, node negative (pN0) or micrometastatic node positive patients (pN1mi), with tumor >0.5 cm. Oncotype DX assay was the most frequently performed assay in the United States, accounting for 97% of all ordered multigene breast cancer tests (based on NCDB 2010-2012 data analysis). The use of multigene assays for breast cancer patients is also embraced by the 8<sup>th</sup> edition of *AJCC Staging Manual* which will be in use from January 2018, with an idea that the inclusion of multigene assays in the TNM staging offers further prognostic stratification of breast cancer patients. Unfortunately, multigene assays are expensive and are not affordable or available for the majority of breast cancer patients (~30% of eligible breast cancer patients underwent Oncotype DX testing in the United States and <20% in the European countries). The need for finding surrogate (s) for Oncotype DX assay became apparent several years ago. Three calculators/nomograms are so far freely available online that use clinicopathologic characteristics of breast carcinomas to predict Oncotype DX results: University of Pittsburgh Magee equation, John Hopkins breast recurrence estimator and The University of Tennessee Medical Center Breast Cancer Nomogram predicting for a high-risk and a low-risk Oncotype DX recurrence score. Methodologies used in creation of these calculators/nomograms will be discussed. Results obtained by the use of calculators will be presented using several hypothetical breast cancer patients and their tumor characteristics.

### Biography

Amila Orucevic obtained her MD degree from Medical School of University of Sarajevo, Bosnia and Herzegovina (1983) and completed her PhD from The University of Western Ontario, London, Ontario, Canada (1996). She is a Board Certified Pathologist for Anatomic and Clinical Pathology by The American Board of Pathology (2002), and Board Certified Pathologist for Anatomic Pathology by The Royal College of Physicians and Surgeons of Canada (2002). Currently she is Attending/Staff Pathologist, Associate Professor, and Director of Research at the Department of Pathology, The University of Tennessee Medical Center, Knoxville, TN, USA. Her research interests are in breast cancer, as well as gynecologic and colorectal cancer. She has published 26 papers in peer reviewed journals.

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## *Ets1* and *ESE1* reciprocally regulate expression of ZEB1/ZEB2, dependently on ERK1/2 activity, in breast cancer cells

Nguyen Duy Sinh<sup>1</sup>, Kaori Endo<sup>1</sup>, Keiji Miyazawa<sup>1</sup> and Masao Saitoh<sup>1,2</sup><sup>1</sup>University of Yamanashi, Japan<sup>2</sup>University of Medicine and Pharmacy, Vietnam

The epithelial-mesenchymal transition (EMT) is a crucial morphological event that occurs during progression of epithelial tumors. We reported previously that levels of the  $\delta$ EF1 family proteins (ZEB1/ $\delta$ EF1 and ZEB2/SIP1), key regulators of the EMT, are positively correlated with EMT phenotypes and aggressiveness of breast cancer. Here, we show that *Ets1* induces ZEB expression and activates the ZEB1 promoter, independently of its threonine 38 phosphorylation status. In the basal-like subtype of breast cancer cells, siRNAs targeting *Ets1* repressed expression of ZEBs and partially restored their epithelial phenotypes and sensitivity to anti-tumor drugs. *ESE1*, a member of the Ets transcription factor family, was originally characterized as being expressed in an epithelial-restricted pattern, placing it within the epithelium-specific ETS subfamily. *ESE1*, highly expressed in the luminal subtype of breast cancer cells, was repressed by activation of MEK-ERK pathway, resulting in induction of ZEBs through *Ets1* upregulation. Conversely, *Ets1*, highly expressed in the basal-like subtype, was repressed by inactivation of MEK-ERK pathway, resulting in reduction of ZEBs through *ESE1* upregulation. These findings suggest that *ESE1* and *Ets1*, whose expressions are reciprocally regulated by MEK-ERK pathway, define the EMT phenotype through controlling expression of ZEBs in each subtype of breast cancer cells.

### Biography

Nguyen Duy Sinh has 20 years of experience in treatment of cancer patients, he was awarded Ph.D. from University of Yamanashi, Japan and his research interests include radiotherapy, progression of progression of epithelial tumors.

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## Simultaneous post mastectomy autologous breast reconstruction and lymphedema treatment

**Dimitrios Dionyssiou**<sup>1,2,3</sup><sup>1</sup>Stanford University, CA, USA<sup>2</sup>Aristotle University of Thessaloniki, Greece<sup>3</sup>Fibralign Co, USA

Patients with breast cancer related upper limb lymphedema often require simultaneous breast reconstruction and lymphedema treatment. Autologous tissue is the gold standard in breast reconstruction, while often can be combined with a free vascularized lymph node transfer (LNT) to restore the disturbed lymphatic circulation. The selected lymph node technique, has been used to identify the most functional lymph nodes of the upper inguinal area, and been associated with an autologous abdominal free flap breast reconstruction. Preoperative SPECT-CT lymphoscintigraphy of the inguinal areas aims to allocate the most functional lymph node above the inguinal crease. A template is created and measurements are transferred onto the patients' abdomen before surgery. LNT is combined with a DIEP flap or an extended fat augmented Latissimus Dorsi flap to reconstruct breast and restore lymphatic circulation. Number of lymph nodes contained into the flap, early or late complications, the need for secondary operations, volume differences, functional improvement and infection episodes of the upper limb, and the patient's satisfaction level are thoroughly documented and will be discussed. LNT represents an effective therapeutic approach for lymphedema patients; reducing significantly limb volume, decreasing recurrent infections and improving the affected extremity overall function. The combination of LNT and an autologous breast reconstruction can provide the best outcomes in one surgical procedure. New ongoing studies are targeting in better outcomes in lymphedema treatment with the use of new technologies as nanoweave collagen matrix to accelerate the lymphangiogenesis between the transplanted at the axilla lymph nodes and the upper limb lymphatic vessels.

### Biography

Dimitrios Dionyssiou has completed his MD at the University of Alexandroupolis, Greece in 1996, and his training in Plastic Surgery in Greece and UK. He is a Board Certified Plastic Surgeon since 2007, and gained his PhD in Wound Healing in 2008. His main interest involves post mastectomy breast reconstruction and microsurgical treatment of lymphedema. He has published more than 40 papers in medical journals, two books, 12 chapters in medical books and has given lectures at various international meetings. He is an active Member of International Medical Associations in Plastic Surgery as well as in Lymphology.

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## How to report statistics in medicine

**Michelle Secic**

Secic Statistical Consulting Inc., USA

The author suspects you do not have the time or desire to learn all the nuances, formulas and theories in statistical computations. You just want to know what tests/methods to use for your study and what needs to be reported. Whether you are reporting results to the FDA or in the medical literature or to upper management, etc. you will need to ensure you are reporting your results accurately, for your type of study. You can think of my guidelines as Cliff's Notes for reporting statistics in medicine. This is just a small snapshot of the comprehensive guide. The author will discuss the following three common study objectives: group comparison, performance goal, identify risk factors. For each of the three common study objectives, firstly the author will present examples of accurately stating the objectives. Secondly, the author will provide a comprehensive template for reporting the results from each of the three types of studies. The templates will include relevant medical examples, numeric results, statistical findings, tests/methods, etc. Finally, the author will provide the full list of concepts covered in my guidelines.

## Biography

Michelle Secic has over 25 years of biostatistical experience. She has worked as a Biostatistician at the Cleveland Clinic Foundation (CCF) for 11 years and was Manager of the Research Section of the Transplant Center at CCF. She then became President of Secic Statistical Consulting, Inc. where she collaborates with researchers from hospitals, pharmaceutical companies, medical device companies and CROs around the world. She coauthored the book, *How to Report Statistics in Medicine: Annotated Guidelines for Authors, Editors and Reviewers* which was published by The American College of Physicians (1st edition 1997, translation to Chinese 2002, 2nd edition 2006, translation into Japanese 2010, translation into Russian 2013). This book is referenced by the FDA in their guidance for industry document, statistical guidance on reporting results from studies evaluating diagnostic tests.

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## Notes:

6<sup>th</sup> World Congress on

# BREAST CANCER & THERAPY

October 16-18, 2017 | San Francisco, USA

## Bioinformatic analysis of aberrant glycosylation in Triple negative breast cancer

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Amity Institute of Biotechnology, India

Breast cancer is the most common cancer in women worldwide, and resistance to the current therapeutics, often concurrently, is an increasing clinical challenge. Glycosylation of proteins is one of the most important post translational modifications. It is widely known that aberrant glycosylation has been implicated in many different diseases due to changes associated with biological function and protein folding. Alterations in cell surface glycosylation, can promote invasive behavior of tumor cells that ultimately lead to the progression of cancer. In breast cancer, there is increasing evidence pertaining to the role of glycosylation in tumor formation and metastasis. In the present study an attempt has been made to study the disease associated sialoglycoproteins in breast cancer by using bioinformatics tools. The sequence will be retrieved from uniprot database. A database in the form of a word document was made by collection of FASTA sequences of breast cancer gene sequence. Glycosylation was studied using yinOyang tool on expasy, followed by involvement of differentially expressed genes in important molecular and signaling casades using KEGG, DAVID and Ingenuity databases. The number of residues predicted O-glc NAc threshold -2 or more was detected and recorded for individual sequence. We found that the there is a significant change in the expression profiling of glycosylation patterns of various proteins associated with Triple negative breast cancer. Differential aberrant glycosylated proteins in breast cancer cells with respect to non-neoplastic cells are an important factor for the overall progression and development of cancer.

### Biography

Navkiran Kaur has completed her PhD in 2007 from Postgraduate Institute of Medical Education and Research, Chandigarh and worked as Senior Research fellow in the same institute. Presently, she is working as Assistant Professor in Amity Institute of Biotechnology, Amity University, and NOIDA. She is working in the area of protein glycosylation and breast cancer and has published papers in reputed journals. She has been sanctioned with a government funded project from UP CST in the field of Breast cancer as Co-investigator

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### Notes: