Under the Auspices of Minister of Public Health
HE Mr. Wael Abou Faour

The Breast Center of Excellence – Naef K. Basile Cancer Institute,
the Clinical and Professional Development Center (CPDC)
and the Continuing Medical Education (CME) Office at the

American University of Beirut Medical Center (AUBMC)

Present the

4th Annual Beirut Breast Cancer Conference
(Beirut BCC4)

Advances in Breast Cancer Management and Updates
February 11-13, 2016
Gefinor Rotana Hotel, Near AUB, Beirut, Lebanon
Message from the Activity Director

It is my great pleasure to welcome you to the Fourth Annual Beirut Breast Cancer Conference BBCC-4, organized by the Breast Center of Excellence, Naef K, Basile Cancer Institute, American University of Beirut Medical Center (AUBMC).

We are pleased to offer you a rich multidisciplinary program that includes most up-to-date diagnostic and treatment information for the management of patients with breast cancer. BBCC-4 scientific program is designed for Medical Oncologists, Surgeons, Radiation Oncologists, Radiologists, Pathologists, Gynecologists, other interested physicians, Nurses, Residents, Fellows, and Medical Students. BBCC-4 includes educational sessions as well as research poster and oral presentation sessions. In an effort to encourage local cancer research, prizes will be awarded to the selected Best Abstracts and Best Posters.

Like every year, we assembled a great panel of speakers and experts to deliver 2015 updates on the management of patients with breast cancer and to have multidisciplinary tumor board sessions. We will present CME- lectures, highlights and updates from major oncology meetings, including St. Gallen, EBCC, ASCO, ESMO, ABC, San Antonio, and the published literature. We will hold two case discussion sessions, and several non-CME satellite symposia. We will also continue the tradition of special scientific talks relevant to both physicians and nurses, and CNE sessions. This year, we add a workshop for NGOs working in the field of awareness and fundraising, and a Pharmacy Workshop on chemotherapy.

We are pleased that AUB Breast cancer Conferences (AUB BCC 1-3) has now evolved into Beirut Breast Cancer Conference BBCC-4, has an increasing number of participants, faculty, scientific sessions and original research presentations, all with the support of the Lebanese Order of Physicians and Medical Scientific Societies, Lebanese Order of Nursing, Lebanese Order of Pharmacists, Lebanese Society of Medical Oncology, Lebanese Society of General Surgery and other Societies, NGOs and Advocacy Groups, as well as the Arab medical Association Against Cancer (AMAAC).

Finally, on behalf of BBCC-4 Scientific Committee, NKBCI and the CME Office at AUBMC, I wish you a fruitful meeting and a wonderful stay in Beirut and Lebanon.

Nagi S. El Saghir, MD, FACP
Chairperson
BBCC-4
General Information

Program Overview
The Breast Center of Excellence of the Naef K. Basile Cancer Institute at the American University of Beirut Medical Center (AUBMC) organizes its fourth Annual Breast Cancer Conference, Beirut BCC4, bringing together the Lebanese Order of Physicians, Lebanese Order of Nurses, Lebanese Order of Pharmacists, various Lebanese and Arab medical associations and non-governmental organizations, and Lebanese and International experts collaborating together in the fight against breast cancer. The program includes updates on breast cancer patient assessment and treatment planning, management of chemotherapy side effects, breast conservative surgery, breast reconstruction, contralateral prophylactic mastectomy, new advances in chemotherapy, anti-HER2 targeted therapy and hormonal therapy and ovarian function suppression, as well as new research abstracts, as well as two pharmacy and NGO workshops.

Objectives
Lebanese and International experts will share knowledge and lessons learnt, discuss novel advances in screening, chemoprevention and loco-regional assessment, patient advocacy and support groups, as well as the latest findings in breast cancer management on surgery, radiation, and systemic therapy.

Target Audience
This annual scientific meeting has been designed for physicians, researchers, scientists, physicians-in-training and medical students, as well as nurses patient advocates. Breast cancer basic and clinical researchers, policymakers, and research promoters/funders are also encouraged to attend.

Venue
This symposium is held at the Gefinor Rotana Hotel, Beirut, Lebanon.

Accreditation
This symposium complies with the Lebanese Order of Physicians Continuing Medical Education and the ANCC guidelines.

American University of Beirut Medical Center is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation.

The planning committee and presenters declare no conflict of interest, including financial interest in product or company presented, direct research support, or other form of potential bias.
**Scientific Committee**

Jaber Abbas, MD  
Hazem Assi, MD  
Hamdy Azim, MD  
Rebecca El Asmar, RN, MSN  
Nagi S. El Saghir, MD (Chair)  
Fady Geara, MD  
Lara Nassar, MD  
Eman Sbaity, MD  

**Abstract Committee**

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Hamdy Azim, MD  
Rebecca El Asmar, RN, MSN  
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Fadi Farhat, MD  
Fady Geara, MD, PhD  
Marwan Ghosn, MD, MHHM  
Lara Nassar, MD  
Eman Sbaity, MD  
Arafat Tfayli, MD  

**FACULTY**

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<td>Ali Shamseddine, MD</td>
<td>Professor</td>
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<td>Latifa Shihab, RN</td>
<td>Short Stay Unit</td>
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<td>Senior Attending Clinical Pharmacist</td>
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Thursday, February 11, 2016
13:00pm: BBCC4 Registration Open

13:25-13:30 Welcome: Nagi El Saghir, MD, FACP

13:30-15:30: Didactic Session I: Advancing Cancer Research in Arab Countries
Moderators: Nagi El Saghir, MD, Marwan Ghosn, MD

13:30-13:45  Impact of Cancer Registries on Research in Arab Countries
            Ali Shamseddine, MD

13:45-14:00  Breast Cancer Genetic Mutations in Arab Countries
            Nagi El-Saghir, MD

14:00-14:15  WHO/EMRO Regional Comparative Breast Cancer Research Project: Where Do We Stand?
            Nada Alwan, MD

14:15-14:30  New Drugs and Clinical Trials in the Middle East
            Fadi Farhat, MD

14:30-14:45  Research in Breast Surgery in the Middle East
            Mahmoud Al-Masri, MD

14:45-15:00  Setups and Research in Breast Radiation Therapy in the Middle East
            Fady Geara, MD

15:00-15:15  AMCI and Cancer Clinical Trials in Africa and Middle East
            Marwan Ghosn, MD

15:15-15:30  Debate on Moving Forward with Clinical Research in Arab Countries
15:30-16:00  Coffee Break

16:00-17:00: Didactic Session II: Updates in Breast Cancer Upfront Management I

Moderators: Sami Faddoul, MD, Assem Hajj, MD, Khaled Ibrahim, MD

16:00-16:20  Breast MRI: What’s New in Early & Locally Advanced Breast Cancer?
Ghina Berjawi, MD

16:20-16:40  Breast and Axilla Conserving Surgery: What’s New?
Mahmoud El-Tamer, MD

16:40-17:00  Breast Neo-adjuvant Therapy: For which stage and which patient?
Sanaa Al-Sukhun, MD

17:00-18:00  OPENING CEREMONY
& Debate on Cancer Control in Lebanon
Moderator Mr. Neshan Haroutiounian

Dr. Nagi El Saghir (President, Beirut BCC4)
Dr. Hassan El-Solh (Director, NKBCI - AUBMC)
Dr. Joseph Makdessi (President, LSMO)
Dr. Maroun Abou Jaoude (President, LSGS)
Dr. Sami Khatib (President, AMAAC)
Dr. Nuhad Dumit (President, ONL)
Dr. Georges Sili (President, LO Ph)
Dr. Antoine Boustani (President, LOP)
HE Mr. Wael Abou Faour (Minister of Health)

18:00 – 19:00  BBCC-4 Reception
Friday, February 12, 2016

07:30  Registration

08:30 - 09:45: Didactic Session III: Medico-Nursing-Advocacy Breast Oncology: Overview and Patient Management
Moderators: Mona Barakat, RN (Hammoud), Salma Geara, RN (HDF), Sawsan Halabi Ezzeddine, RN (MGH), Iman Kouatly, RN (AUBMC), Zeina Koussa, RN (AUBMC), Dina Moutran, RN (LAU-Rizk)

08:30 - 08:45  Professional development of Oncology Nurses
Ghina Khatib, RN

08:45 - 09:00  Telephone Triaging: Tips and practice
Latifa Shihab, RN

09:00 - 09:15  Management of ulcerated breast lesions
Ghada Keserwani, RN

09:15 - 09:30  Radiation Therapy: Recognizing the Oncology Nurse’s roles
Simonne Karam, RN

09:30 - 09:45  Advances in breast cancer 2015-2016 in brief
Nagi El-Saghir, MD

Participants who attend the „Didactic Session III: Medico-Nursing-Advocacy Breast Oncology: Overview and Patient Management“ will receive 1.25 contact hours

The planning committee and the presenter(s) declare no conflict of interest including financial interest in product or company; direct research support, or other form of potential bias.

American University of Beirut Medical Center Nursing Services Clinical and Professional Development Center is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation.
09:45 - 10:00  Coffee Break

10:00 – 11:00  Panel Discussion I: Breast Cancer Awareness and Patient Support in Lebanon and Arab Countries

*Moderators: Ms. Jacqueline Chehwan, TV Anchor*

PANEL: Salim Adib, PHD (AUB Public Health), Walid Ammar, MD (MOPH), Labib Ghulmiyeh, MD (AUBMC), Nuhad Yazbik-Dumit, PhD (ONL), NGOs: Dr. Nada Alwan (NCRC-Iraq), Loryne Atoui (OWS), Hanan Charara (Ajialona), Nadine Chatila (AUBMC), Dr. Mirna Doumit (LAU), Rima Dandashi (MJF), Anne Franjieh (FF), Janane Hanna (BALSAM) Fatme Beydoun (LBCF)

11:00 – 12:30pm: Session IV: New Advances in Imaging and Pathology

*Moderators: Reine Fahed, MD, Fatima Ghandour, MD, and Asaad Mohana, MD*

11:00 - 11:15  Screening mammography: Advances and New Tools
Nagi Khouri, MD

11:15 - 11:30  Update on Breast and Axillary Ultrasound
Lara Nassar, MD

11:30 - 11:45  PET scanning in staging of breast cancer
Mohamad Haidar, MD

11:45 -12:00  ER, PR, HER2, Ki67, AR, genomic profiling and beyond!
Fouad Boulos, MD

12:00- 12:30  Case presentations in breast imaging
Nagi Khouri, MD

12:30-13:00  **Satellite Symposium: Supported by ROCHE (Non-CME):** Innovation for HER protection
13:00- 14:00  LUNCH BREAK

14:00- 15:15:  Session V: Updates in Breast Cancer Therapy
Moderators: Nizar Bitar, MD, Ghazi Nsouli, MD

14:00 - 14:15  Neo-adjuvant therapy for TNBC
Hikmat Abdel-Razeq, MD

14:15 - 14:30  Neoadjuvant Hormonal Therapy
Omalkhair Aboulkhair, MD

14:30 - 14:45  Neoadjuvant therapy with Dual anti-HER2 therapy for HER2+ disease
Olivia Pagani, MD

14:45 - 15:00  Total versus Partial Mastectomy for Primary Breast Cancer: New Data
Mahmoud Al-Masri, MD

15:00 - 15:15  Bone Health in Breast Cancer Patients: Adjuvant and Metastatic
Marwan Ghosn, MD

15:15 - 15:45  Coffee Break

15:45 - 17:00: PANEL Session II: Multidisciplinary Tumor Boards -1 Case Discussions: Georges Aftimos, MD, Georges Chahine, MD, Mahmoud El-Tamer, MD, Youssef El-Zein, MD, Sami Faddoul, MD, Fadi Farhat, MD, Faek Jamali, MD, Nagi Khouri, MD, Elie Nasr, MD, Olivia Pagani, MD, Ahmad Saadeddin, MD, Arafat Tfayli, MD

17:00-18:00  Satellite Symposium: Supported by Astra Zeneca (Non-CME): Updates & Guidelines for 1st & 2nd lines Hormonal therapy for post-menopausal patients
Saturday, February 13, 2016

Rotana A – C Level

09:00 - 10:45: Session VI: Major advances in Breast Cancer Surgery  
*Moderators: Negib Geahchan, MD, Nasser Hammoud, MD, Ayman Harake, MD, Mustapha Uwaidat, MD*

09:00 - 09:20  Optimal management of the axilla  
Faek Jamali, MD

09:20 - 09:40  Nipple saving surgery in breast cancer  
Eman Sbaity, MD

09:40 - 10:00  Oncoplastic techniques in breast cancer surgery  
Jaber Abbas, MD

10:00 - 10:20  Therapeutic reduction mammoplasty: a new technique for partial mastectomy  
Bechara Atiyeh, MD

10:20 - 10:45  Surgery after Neo-adjuvant Therapy  
Mahmoud El-Tamer, MD

10:45 - 11:00  Coffee Break

11:00 - 12:00: Panel Session III: Multidisciplinary Management: Tumor Boards -2  
*Case Discussions: Matti Aapro, MD, Hazem Assi, MD, David Atallah, MD, Fouad Boulos, MD, Mahmoud El-Tamer, MD, Mohamad Haidar, MD, Khaled Ibrahim, MD, Hassan Jaafar, MD, Imad Kaddoura, MD, Nagi Khouri, MD, Olivia Pagani, MD, Eman Sbaity, MD, Bassem Youssef, MD*

12:00-12:30  **Satellite Symposium: Supported by Novartis (Non-CME):** Overcoming resistance in HR+ advanced breast cancer: the role of Afinitor
12:30-13:00 Satellite Symposium: Supported by Novartis (Non-CME): The safety profile of Afinitor: A real world evidence perspective

13:00-14:00 Lunch break

14:00 - 15:20: Session VII: Monday Morning Clinic: Advances for 2016
Moderators: Marwan Ghosn, MD, Fadi Farhat, MD, Fadi Karak, MD, Ahmad Saadeddin, MD

14:00 - 14:20 Monday Morning Clinic: Adjuvant & Neoadjuvant Hormonal Therapy in 2016
Olivia Pagani, MD

14:20 - 14:40 Monday Morning Clinic: Adjuvant and Neoadjuvant Chemotherapy in 2016
Matti Aapro, MD

14:40 - 15:00 Monday Morning Clinic: ABC3 Guidelines for Advanced Breast Cancer for 2016
Nagi El-Saghir, MD

15:00 - 15:20 Monday Morning Clinic: Glance at Immunotherapy for Breast Cancer in 2016
Hamdy A. Azim, MD

15:20-16:40: Oral abstract presentations Session: Best Posters & Best Oral Presentations prizes:
Moderators: Matti Aapro, MD, Hamdy Azim, MD, Nagi El Saghir, MD
Marwan Ghosn, MD, Olivia Pagani, MD, Eman Sbaity, MD, Arafat Tfayli, MD

15:20 -15:30 Short relative telomere length (RTL) in peripheral blood is associated with breast cancer risk in the Lebanese
Fatima Sleiman

15:30-15:40 Molecular Profiling guided treatment in refractory solid tumors: focus in breast cancer patients of a single center
Toni Ibrahim, MD
15:40-15:50 Efficacy and safety of Everolimus in hormone positive breast cancer in a developing country: real-life single institutional experience
Tarek Assi, MD

15:50-16:00 Delay in breast cancer adjuvant chemotherapy: profile of latecomers and potential effect on survival
Fernand Bteich, MD

16:00-16:10 Chemotherapy Extravasation: Guidelines and Practical tips
Firas Kreidieh, MD

16:10-16:20 Examining the Drug Approval Process in Lebanon, Egypt, Algeria, and Gulf Arab Countries
Firas Kreidieh, MD

16:20-16:30 Prevalence and clinical characteristics of BRCA mutation in an unselected cohort of newly diagnosed Lebanese breast cancer patients
Raafat Alameddine, MD

16:30-16:40 Age less than 40 years is an independent predictor of worse prognosis among Lebanese breast cancer patients: Analysis from a prospective cohort
Raafat Alameddine, MD

Jade B-R Level
BBCC-4 Workshops

09:30 - 11:00: Oncology Pharmacy Workshop
Moderators: Georges Sili, PharmD, Ulfat Usta, PharmD

09:30 – 09:40 Introduction
Georges Sili, Pharm D
09:40 – 10:00  Improving medication safety of chemotherapy drugs
              Maha Wazni, RPh

10:00 – 10:20  Pharmacist's role in counseling
              Rhea Saad, RPh

10:20 – 10:40  Updates on safe administration guidelines
              Fatima Ismail, RPh

10:40 – 11:00  Basics of aseptic technique
              Salam Abdelwahed, RPh

11:00 - 13:00: NGO Workshop in collaboration with the Lebanese Breast
              Cancer Foundation.
              Facilitator: Ziad Hamdan

11:00 – 13:00  NGOs, Patient Advocacy, Campaigning and Fundraising
Abstracts

Posters and Abstracts Presentation
Short relative telomere length (RTL) in peripheral blood is associated with breast cancer risk in the Lebanese

Sleiman F¹, Awada Z¹, Nasr R², Tfrayli A³, Boustany R⁴, Makoukji J⁴, Zgheib, NK¹

(1) Department of Pharmacology and Toxicology, AUBFM; (2) Department of Anatomy, Cell Biology, and Physiology, AUBFM; (3) Department of Internal Medicine, AUBFM; (4) Department of Biochemistry & Molecular Genetics, AUBFM

*Corresponding author: Nathalie K. Zgheib (nk16@aub.edu.lb)

Descriptive Statement: Relative telomere length that is critical for maintaining genomic stability is significantly shorter in breast cancer patients when compared to non-breast cancer controls.

Background: Telomeres play a critical role in maintaining genomic stability. Previous studies linked relative telomere length (RTL) with several cancer types. However, clinical studies on the association between blood RTL and breast cancer showed inconsistent results. Hence, more studies are required to solve this inconsistency.

Aims: Herein, we aim to address the following three questions: Is RTL in whole blood of breast cancer patients significantly different from that of non-breast cancer female controls? Is RTL altered in breast cancer tissues when compared to normal adjacent tissues? Is RTL in breast cancer tissues congruent with RTL in whole blood and circulating tumor DNA?

Methods: Lebanese breast cancer patients (n=87) of different IDC stages and grades have already been recruited at our institution, the American University of Beirut Medical Center (AUBMC), between 2012 and 2013. Peripheral blood and tissues were collected before treatment initiation and stored at -80°C. In addition, and after signing an informed consent, 501 Lebanese subjects, of whom 328 were females and older than 18 years of age were recruited from Greater Beirut between February and June 2014, and blood was stored. Telomere and single copy gene (human beta-globin) in peripheral blood were amplified by real-time polymerase chain reaction (RT PCR).

Results: RTL in peripheral blood of breast cancer patients was significantly shorter from that of non-breast cancer female controls (Mean RTL ± SD: 0.405 ± 0.099 vs. mean RTL ± SD of 0.93 ± 0.6, P= 0.000). Further work is in progress on cancerous and normal adjacent breast tissues, as well as on circulating tumor DNA to detect whether RTL is a biomarker for breast cancer development, severity, and outcome.

Conclusion: This is the first study to show that RTL is significantly shorter in Lebanese breast cancer patients when compared to non-breast cancer Lebanese controls. Analysis is ongoing to adjust for factors such as age, body mass index, known risk factors of breast cancer, smoking status, alcohol consumption, and complete blood count with % neutrophils.

Funding Source: American University of Beirut Faculty of Medicine Medical Practice Plan (AUBFM MPP)
Molecular Profiling guided treatment in refractory solid tumors: focus in breast cancer patients of a single center
Toni IBRAHIM MD, Abir EL AHMADIE MD, Fadi EL KARAK MD, Fadi FARHAT MD, Joseph KATTAN MD, Colette HANNA MD, Anthony SAROUFIM, Lana AL COSTA, Marwan GHOSN MD

Background: A pilot study has shown that comprehensive molecular profiling can be used to find molecular targets in patients with refractory metastatic cancer. In 18 of 66 patients treated with a molecularly guided therapy, the approach resulted in a longer PFS on an MP-suggested regimen than on the prior regimen on which the patient had just experienced progression. Exploratory analysis demonstrated that this PFS ratio correlated with the clinical parameter of overall survival. Recent study in patients with refractory breast cancer showed that tumor profiling resulted in a revision of the original treatment decision for all patients and tumor profiling-based therapy resulted in a clinical benefit in 52% of heavily pretreated patients.

The aim of this study was to retrospectively assess the impact of using molecular profiling to guide treatment choice in patients with rare or refractory cancer focusing on breast cancer in routine clinical practice at a single center in Lebanon.

Method: One hundred one patients with rare or refractory cancer being treated at Hôtel Dieu De France –Saint Joseph University were referred to Caris Life Science for comprehensive tumor profiling between August 2011 and February 2015. Specific testing was performed on tumor biopsy samples from all patients per physician request and included a combination of sequencing (Sanger, NGS or pyrosequencing), protein expression (IHC), gene amplification (CISH or FISH), and/or RNA fragment analysis. IHC analysis was performed on formalin-fixed paraffin-embedded tumor samples using commercially available detection kits, automated staining techniques (Benchmark XT, Ventana, and AutostainerLink 48, Dako), and commercially available antibodies. Fluorescent in-situ hybridization (FISH) was used for evaluation of the HER-2/neu [HER-2/CEP17 probe], EGFR [EGFR/CEP7 probe], and cMET [cMET/CEP7 probe] (Abbott Molecular/Vysis). HER-2/neu and cMET status were evaluated by chromogenic in-situ hybridization (INFORM HER-2 Dual ISH DNA Probe Cocktail; commercially available cMET and chromosome 7 DIG probe; Ventana). The same scoring system was applied as for FISH. Direct sequence analysis was performed on genomic DNA isolated from formalin-fixed paraffin-embedded tumor samples using the Illumina MiSeq platform. Specific regions of 45 genes of the genome were amplified using the Illumina TruSeq Amplicon Cancer Hotspot panel.

Results:

Demographic results: 101 patients in total (52 female, 49 male), 1 with insufficient material. Average age = 59.8 yo (median 61 yo, range 21-81). The majority of patients had an ECOG performance status of 0 or 1. Median prior lines of therapy – 2 (range 0 – 10). Average time to testing from biopsy = 172 days (median 18 days, range 7-2551). 70% of biopsies assessed were taken from a metastatic site. The major type of neoplasia included was breast cancer (25%), among which 75% were ductal, 18.75% were lobular and just one case of phyllode tumor. Fifty percent had hormone receptor + her 2 neg, 43.75% were triple negative and the
remaining one subject had triple positive tumor. Only data for breast cancer will be presented in this abstract.

Treatments Associated with Potential Benefit and Potential Lack of Benefit: Targeted therapies were associated with benefit in less than a quarter of patients overall and could be avoided in the majority of patients.

Treatment Selection: 20 patients were treated according after tumor profiling was performed and had at least one study evaluation afterwards. 17 (85%) patients received drugs associated with potential benefit only 1 (5%) patients received treatments not mentioned on the report. 15 (75%) patients received monotherapy of which 8 (40%) were per os.

Clinical Outcomes: Complete response (CR): 2 patients (10%); Partial response (PR): 4 patients (20%); Stable disease (SD): 8 patients (40%); Progressive disease (PD): 6 (30%). Disease control rate: 70% with an average duration of response 4.7 months.

Conclusions: Comprehensive multiplatform tumor profiling is feasible, with turnaround time amenable to routine clinical practice. The most common mutations identified were not direct candidates for targeted therapies. The majority of treatment associated with benefit are commercially available cytotoxic agents which allows high clinical utility of the approach. Clinical outcomes are very promising with the use of tumor-profiling guided treatment.

**Efficacy and safety of Everolimus in hormone positive breast cancer in a developing country: real-life single institutional experience**

Tarek Assi, Elie El Rassy, Samer Tabchi, Ralph Chebib, Tania Moussa, Colette Hanna, Fadi El Karak, Fadi Farhat, Joseph Kattan, Marwan Ghosn

*Department of Hematology-Oncology, Faculty of Medicine, Saint Joseph University, Beirut, Lebanon*

**Introduction:** Breast cancer is the second leading cause of cancer-related mortality despite the staggering improvement in cancer therapeutics. Published data so far demonstrate endocrine therapy as the cornerstone treatment for patients with hormone receptor-positive metastatic breast cancer. Unfortunately, most patients eventually develop resistance to this treatment. One possible option to overcome this resistance is via inhibition of the mTOR pathway.

**Patients and Methods:** The purpose of this study is to evaluate the efficacy of mTOR inhibition in reversing hormone resistance in the Lebanese breast cancer patients. We retrospectively evaluated the medical records of all hormone receptor-positive breast cancer patients who received a combination of Exemestane and Everolimus. Patient demographics, prior lines of therapy, response to the combination therapy and reported adverse events were analyzed. Efficacy of the intervention according to independent factors and notable side effects encountered were the primary points of the evaluation.

**Results:** In total, 50 patients received the combination of Everolimus and Exemestane between January 2013 and December 2015. Mean age of the study population was 61 ± 11 years.
Almost two third of the patients were exposed to at least three or more lines of therapy while 86% of the patients were exposed to chemotherapy during their disease course. Sensitivity to hormonal therapy prior to the start of the combination treatment was estimated at 64%. Response rate was 14% with all patients being partial responders. After regular interval evaluation, the median progression-free survival was 5.2 months since initiation of therapy. The main toxicities associated with Exemestane and Everolimus were stomatitis (22%), myalgia (22%), skin toxicity (8%) and hyperglycemia (4%). Toxicities were limited to grade 1 and 2. Management of adverse effect included temporary interruption or dose reduction in 22% of patients. Notably, non-infectious pneumonitis was only reported in 2% of patients.

Conclusion: Everolimus has been shown to be an effective drug in overcoming hormonal resistance in the Lebanese breast cancer patients with results inferior to those reported in the BOLERO-2 population. The particular differences in molecular and pathological aspects of breast cancer in our region should stimulate extensive research for a better understanding of the particular pattern of the disease. A better tolerance of the drug is attributed to a control of the drug's side effects via adapted and preventive strategies.

Delay in breast cancer adjuvant chemotherapy: profile of latecomers and potential effect on survival
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Purpose: To determine demographic, clinical and pathological factors associated with a delay in initiating adjuvant chemotherapy after breast cancer surgery in patients with non-metastatic breast cancer and to evaluate for a potential detrimental effect of this delay on survival.

Patients and Methods: Eligible patients for this retrospective study had stage I, II or III breast cancer treated with surgery and having received adjuvant chemotherapy. The influence of different factors on the delay between surgery and chemotherapy (DSC) was evaluated in this population as well as the effect of this deferment on disease-free survival (DFS).

Results: 245 patients diagnosed with localized breast cancer between 2003 and 2010 (median age, 49 years) were enrolled on the study. Metastatic and in situ cancers were excluded from the analysis of associations. 24% had stage I disease, 46.8% were at stage II and 22.7% had stage III tumors. 13% had ER-HER2+ cancer, 53.2% ER+HER2-, 15.2% ER+HER2+ and 18.6% ER-HER2-. 53.2% of patients were mastectomized while 46.8% had breast conserving surgery. Patients were categorized into three groups according to DSC: ≤29 days, 30 to 49 days, and ≥50 days. Factors associated with delay in chemotherapy were advanced age at the moment of diagnosis (p=0.02), involvement of 3 or less axillary lymph nodes (p=0.02), a diagnosis in 2005 or 2006 (p=0.017) and in the ER+HER2- subtype, residence at distance from the capital (p=0.045). In a 5-year follow-up of 137 patients, 15 locoregional or distant relapses were noted (10.9% of patients). Disease-free survival (DFS) was 29.1 months. Survival analysis did not show a negative impact of a 30 to 50-day delay on disease-free survival compared to a delay of less than 30 days. (p=0.795) Moreover, an analysis of survival according to breast cancer subtype did not show a significant difference between various categories of the disease. (p=0.754)

Conclusion: Significant delays in initiating adjuvant breast cancer chemotherapy can happen in women aged 50 years or more, those with three or less involved axillary lymph nodes as well as in patients with ER-HER2- breast cancer living at distance from urban areas. Women with such profiles should be counseled about the importance of avoiding unnecessary breaks in treatment.
Continuing Medical Education Office

during the first interview. Nevertheless, postponements potentially affecting survival (>3 months) are scarce (<5%) which should temper the fear of moderate and justified delays especially that a DSC of 30 to 50 days instead of 29 days or less after surgery seem not to affect 5-year disease-free survival negatively.

Chemotherapy Extravasation: Guidelines and Practical tips

Kreidieh FY, Moukadem HA, El-Baba SM, El-Asmar RE, Shihab LF, El Saghir NS

**Background:** Chemotherapy extravasation is a safety concern to the medical team and the patients whenever IV chemotherapy is administered. It is defined as the accidental infiltration of chemotherapy into the subcutaneous or sub-dermal tissue at the injection site and can result in tissue necrosis.

**Objectives and Methods:** We review the clinical aspects of chemotherapy extravasation and latest advances in classification, prevention and management of chemotherapy extravasation (1-3,7). We review the grading of extravasation and tissue damage according to various chemotherapeutic drugs and present an update on treatment and new antidotes including dexrazoxane for anthracyclines extravasation (4). We present a situation online and on-site survey of chemotherapy centers and hospitals in Lebanon. We highlight the importance of education and training of the oncology team for prevention and prompt pharmacological and non-pharmacological management and stress the availability of new antidotes like dexrazoxane wherever anthracyclines are being infused.

**Results:** Majority of centers in Lebanon do not have posted instructions and guidelines on chemotherapy extravasation. AUBMC holds an annual educational session to oncology nursing staff as part of Nursing Skills Competency Program. Cases continue to occur, and incident reports are not always filled out. Antidotes are either out of stock or not available at various hospitals or clinics nor even in the country. There are no registries of cases of extravasation. Lectures and conferences on attitudes to take (“conduite à tenir”) for both physicians and nurses are minimal. Prevention and Management should be emphasized. Chemotherapy extravasation can be prevented through medical team continuing education, appropriate vascular access, appropriate cannula and needle selection, and patient education (1,5-7). Management of extravasation consists of both initial non-pharmacological methods, including normal saline and application of compressors, and pharmacological, including the use of antidotes. All institutions that administer intravenous chemotherapy should have known antidotes available.

**Conclusions:** Safe administration of chemotherapy and prevention of extravasation is a shared responsibility among medical team members. Education of patients about risks and manifestations are essential. While only some international societies and healthcare institutions have published and posted online their own policies and guidelines regarding extravasation prevention and management, there is an urgent need to have local institution education, training and guidelines, and antidotes should be available. We will summarize tips from our recent review published in the World Journal of Clinical Oncology in February 2016.

3. El Saghir NS and Otrock ZK Docetaxel extravasation into the normal breast during breast cancer treatment. Anticancer Drugs 2004; 15: 401-404
Examining the Drug Approval Process in Lebanon, Egypt, Algeria, and Gulf Arab Countries
El Saghir NS, Kreidieh FY

Introduction: Regulatory agency drug approval plays an important role in confirming the safety and efficacy of new drugs and ensuring patients have access to the best treatments in a timely manner. Patients’ access to cancer drugs varies among different regions of the world. Patients in some regions may need to wait years more than their counterparts elsewhere for the new drug to get approved. This abstract is based on our study published in ASCO Daily News at the Annual Meeting of the American Society of Clinical Oncology ASCO 2015 (1).

Background: A study conducted by Kasteng et al. compared the time between the introduction and drug approval of new cancer drug therapies among different countries worldwide. The time between introduction and drug approval ranged from 0.3-2.0 years (2). In Europe, the average total time was 0.9 years. In the United States, the median total approval time was 0.5 years for priority new molecular entities and 1 year for standard New Drug Applications and biologics. In Middle Eastern countries, median time ranged between 0.3 years in Bahrain and 1.75-2.0 years in Saudi Arabia and Qatar, respectively (2). In this review, we looked at drug registration in Lebanon, and compared it to drug approval process in other countries in Middle East and Gulf Arab countries.

Results: The variation in time for drug approval among different regions of the world is due to differences in national regulatory procedures. In Lebanon (3), the drug must have been proven safe and effective through clinical trials and preferably approved by the U.S. Food and Drug Administration (FDA) and/or European Medicines Agency (EMA) for the specific indication requested. The process takes 8-12 months. In Egypt (3), the drug approval application is viewed by multiple committees, and the approval process can take up to 5 years. In Algeria (4), revision of the Drug Record file generally takes 3 months or more, after which the Ministry of Health grants a 1-year provisional registration. In Saudi Arabia (5), drug approval, which can take up to 18 months, takes place through a Drug Sector in the Saudi Food and Drug Authority. In Bahrain (3), the average time for approval of new drugs is 3-6 months. In Oman (3), registration of a pharmaceutical product generally requires 6-12 months. However, in order to authorize local marketing of a drug in Bahrain and Oman, it has to have been marketed in another country for a minimum of 2 years.

Conclusion: Better collaboration between physicians and health authorities, who should watch for indiscriminate use and abuse of new drugs that are generally highly priced by pharmaceutical companies, is needed. Lebanon and Low- and Middle-Income countries need to look at their process of drug approval in order to avoid delays making effective drugs available.
for their patients (6). They also should look at resource-adapted guidelines and perform local research for better utilization of their resources and new drugs.


Prevalence and clinical characteristics of BRCA mutation in an unselected cohort of newly diagnosed Lebanese breast cancer patients

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Background: Data on genetic mutation in Ethnic Arab patients (pts) is scarce. We reported that BRCA pathogenic mutations are present in 5.6% of pts at high risk for carrying a genetic mutation (Oncologist. 2015 Apr;20(4):357-64). We report here-in the prevalence of BRCA mutation in a cohort of newly diagnosed Ethnic Lebanese Arab primary breast cancer patients unselected for risk factors.

Methods: Between 2011 and 2013, 126 Lebanese women with newly diagnosed breast cancer were recruited. Pts had early or locally advanced disease. Study protocol was approved by IRB. Informed consent was obtained. Coding exons and intron-exon boundaries of BRCA1 and BRCA2 were extracted from peripheral blood DNA. Gene sequencing was performed following the Sanger technique at AUB Department of Biochemistry and Genetics, and NGS at Genekor Laboratories in Athens. Study was funded by research grants from Glaxo SmithKline and Novartis.

Results: BRCA gene testing was performed on 106 pts. Sanger technique was used on 25 pts and NGS on 81 pts. Median age of pts was 45 years. 53 out of the total of 106 pts (50%) had a positive family history (FH) of breast cancer. 4 out of 8 pts (50%) with positive BRCA mutation had a positive FH for breast cancer. 69 pts (65%) were ER/PR positive and HER2 negative, 26 pts (25%) were Her2 positive and 11 pts (10%) were triple negative breast cancer (TNBC). BRCA1 and 2 pathogenic mutations were present in 3 pts (2.8%) and 5 pts (4.7%) respectively. Of the BRCA1 pts, 2 out of 3 had a positive FH of breast cancer, 2 out of 3 had TNBC. Of the 5 BRCA2 pts, 2 had a positive FH for breast cancer, 4 had positive hormone receptors, 1 had a positive HER2, and 1 had TNBC. BRCA1 Variants of Unknown Significance (VUS) were found in 2 pts (1.9%) and BRCA2 VUS were found in 5 pts (4.7%).
Conclusions: The prevalence of BRCA 1 and 2 gene mutations in an unselected cohort of ethnic Lebanese Arab breast cancer pts, of whom 50% turned out to have a positive family history, is 7.5% with a BRCA VUS rate of 6.6%. These rates in a population of patients whose median age is 45 years are lower than those seen in similar Caucasian patients. Search for other mutations is needed.

Age less than 40 years is an independent predictor of worse prognosis among Lebanese breast cancer patients: Analysis from a prospective cohort

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Background: Breast cancer among young women in Lebanon is a subject of rising public concern. Several retrospective studies have reported a younger median age at presentation and a more aggressive disease among younger patients. In Lebanon, 18-20% of breast cancer patients are younger than 40, compared to 5-7% in Europe and USA. In this study, we prospectively assessed the association between different baseline characteristics and outcomes among newly diagnosed Lebanese breast cancer patients.

Methods: We recruited a sample of 126 women newly diagnosed with breast cancer presenting to American University of Beirut Medical Center (AUBMC). Immunohistochemical, molecular and genetic assays were performed; in addition, clinical data was collected. Data and disease free survival were analyzed using Chi-square, Cox regression analysis, and Kaplan Meier.

Results: 46 patients were ≤ 40 years and 80 patients >40 years. Median follow up duration was 35 months. 11 out of 40 patients ≤ 40 years (24.4%) experienced disease relapse in contrast to 6 out of 86 patients >40 years (7.9%). A wide immunohistochemical panel included ki-67, cyclin B1, p53, PDGFR and VEGFR and did not reveal any significant difference between the two age groups. On multivariate analysis including age, stage, grade, Her2neu status, and triple negative phenotype. Only age below 40 and stage III were significantly associated with shorter disease free survival with hazard ratios of 6 (p= 0.003, 95% CI: 1.9 – 19.6) and 2.7 (p= 0.058, 95% CI: 0.7 – 10.5), respectively. The three-year disease free survival for patients below 40 was 70.5%; whereas, it was 92.1% for patients above 40 (p=0.001).

Conclusions: Age ≤ 40 years was an independent risk factor for recurrence in this cohort of patients. This finding warrants a special consideration of age as a poor prognostic factor in daily decision-making. It also invites future research investigating the molecular biology of breast cancer affecting young women.
BIOGRAPHIES
Nagi S. El-Saghir, MD, FACP is Professor of Medicine and Director of Breast Center of Excellence, Naef K. Basile Cancer Institute, American University of Beirut Medical Center.

He graduated from Universite Libre de Bruxelles, completed his training in Internal Medicine at The Brooklyn Hospital-State University of New York, and Hematology Oncology at St. Luke’s Roosevelt Hospital Center-Columbia University College of Physicians & Surgeons in New York and is certified by the American Boards of Internal Medicine and Medical Oncology. He is Founding President of the Lebanese Society of Medical Oncology (LSMO), Past-Chair of International Affairs Committee of the American Society of Clinical Oncology (ASCO), Co-Chair of ASCO Guidelines Advisory Group, Co-author of Consensus Guidelines for Advanced Breast Cancer ABC1, ABC2 and ABC3, Co-author of Resource-stratified Guidelines for Breast Cancer management (BHGI), Member of the Board of the Arab Association Against Cancer, and President of the Lebanese Breast Cancer Foundation.

Dr. El Saghir has over 100 publications in peer-reviewed journals and textbooks. His research is focused on breast cancer and young women, genetic mutations, early detection, management guidelines and international phase III clinical trials. He published pioneering articles on epidemiology of cancer in Lebanon and Arab countries, locally advanced breast cancer, breast cancer in developing countries and BRCA mutations. He is a regular speaker at Lebanese, Arab and international oncology conferences including ASCO, ESMO, EBCC, ABC, BHGI and San Antonio. He serves as regular peer reviewer, International Editor for JCO, Deputy Editor for The Breast (2006-2013) and Editorial Board Member of ASCO’s Journal of Global Oncology and ASCO Post.

He is author of “ABC of Breast Diseases” in Arabic and Awareness Booklet “Knowledge Road Map to Cure”. He is President of the Lebanese Breast Cancer Foundation and leads major breast cancer awareness campaigns. His research, publications, media interventions, books, and community activities, along with his colleagues, are recognized to have led to significant down-staging of breast cancer in Lebanon and improved patients’ outcome and he has received the CNRS National Center for Scientific Research Prize for Cancer Research (2015), Medal of Honor for Achievements (2002) and the National Cedar Medal of Honor -Rank Officer (2014) from the Presidents of Lebanon, Lebanese Order of Physicians, LSMO, Cairo University, League of Womens’ Rights awards and others.

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Speakers’ Biographies

**Matti Aapro, MD**

Received his medical degree from the Faculty of Medicine, University of Geneva, Switzerland. He was a fellow at the Arizona Cancer Center in Tucson and was the founding chair of the Medical and Radiation Therapy Department at the European Institute of Oncology in Milano. He is presently Dean of the Multidisciplinary Oncology Institute, Genolier, Switzerland. Dr. Aapro serves as Executive Director of the International Society for Geriatric Oncology (SIOG). He was member of the Board of the European Organization for Research and Treatment of Cancer (EORTC). Dr. Aapro is past-President of the Multinational Association for Supportive Care in Cancer (MASCC). Dr. Aapro chaired the scientific and organizing committees of UICC’s World Cancer Congress of 2008 and continues to serve UICC for the WCC in China in 2010. He was member of the ECCO/ESMO 2009 Scientific Committee. He coordinates the SPCC program of the European School of Oncology. Dr. Aapro is Editor-in-Chief of Critical Reviews in Oncology/Hematology, as well as Associate Editor of Annals of Oncology, Associate Editor for the geriatric section of the Oncologist and member of the editorial board of Journal of Clinical Oncology (breast section). He has authored more than 250 publications and his major interests are new drug development, breast cancer, cancer in the elderly and supportive care.

**Jaber Abbas, MD, FACS**

Is a clinical associate professor at the Department of Surgery at the American University of Beirut Medical Center. Dr. Abbas is specialized in General Surgery mainly interested in General surgical Oncology- Cancer Surgery Procedures Thyroid, Parathyroid surgery, General cancer surgery, Breast Cancer, Soft tissues. He is American Board Certified. He specialized in General Surgery and did his internship and Residency at AUBMC and his fellowships at N.Y University Medical Center and Roswell Park Memorial Institute. Research Interests: Minimally invasive parathyroid surgery Sentinel Node Biopsy

**Fatima Abdel-Karim Ismail, RPh**

Is from Beirut, Lebanon. Fatima got her B.S. degree in pharmacy from Beirut Arab University on 2009. Fatima is a senior hematology-oncology clinical pharmacy specialist at American University of Beirut-Medical Center with 7 years of experience. Fatima is also a clinical preceptor in professional pharmacy practice program with the Faculty of Pharmacy of Beirut Arab University. Her professional clinical interests include hematological malignances, hematopoietic stem cell transplantation and pediatric oncology. Fatima is a member in Lebanese Order of Pharmacists, ACCP (American College of Clinical Pharmacy), and POEAM (Pediatric Oncology Eastern and Mediterranean Group) and other committees. Fatima has a strong interest in medication safety in oncology, pharmacy leadership and administration. Fatima was invited several times as a speaker from AUB-CME office and ANCC program in AUBMC. Fatima is responsible for preparation of guidelines for IV and oral chemotherapy medications and she has the pleasure to share her experience with you in this congress. Fatima Abdel Karim Ismail got her B.S. degree in Pharmacy from Beirut Arab University in 2009.
Omalkhair Abulkhair, MD is currently a Consultant in the Division of Adult Medical, Department of Oncology in Ministry of National Guard Health Affairs – Saudi Arabia and Assistant Professor at the King Saud bin Abdulaziz University for Health Sciences.

Being one of the most recognized oncologists in the Middle East, she was nominated to be part of the Women in High Places: Fight Against Cancer, an international organization of prominent women in their respective areas.

She is the Course Director of major symposia in the department which is the “Middle East Best of San Antonio Breast Cancer Symposium” and “Cancer Prevention and Early Detection Symposium”. She was also selected as the Chairman for MENA-NCCN Guidelines Committee for Breast Cancer. This committee aims to unify the guidelines for breast cancer management in the region. Furthermore, Dr. Abulkhair has written numerous publications and abstracts which leads to receiving three awards for best abstract.

Sana Al Sukhun, MD, MSc is a Consultant in Medical Oncology/Hematology, mainly interested in translational research particularly development of biologic therapies targeting breast, ovarian, and gastrointestinal malignancies.

Her work focuses on advocating for greater awareness of cancer particularly breast cancer, its regional impact, and the importance of research to overcome cancer and improve health care in Jordan and the region.

*Dr Al Sukhun is the president of the Jordanian Oncology Society. She is also the president of the Jordanian Society of American Medical Graduates. She is a member of International Affairs Committee of ASCO and their liaison to the Educational Committee of ASCO. She is an active member of various societies including Arab Medical Association Against Cancer (AMMAC), ESMO and many other regional and international societies. She served as Director of Breast and Gynecology Service at King Hussein Cancer Centre, and Assistant Professor of Medicine at the Department of Hematology/Oncology in the Faculty of Medicine at the University of Jordan. She has helped establish the National Breast Cancer Screening Guidelines Program in Jordan, contributed to the 2014 UICC Review of the World Health Organization’s Model List of Essential Medicines for cancer, organized & chaired the first conference on Breast Cancer in Jordan mainly focusing on "Neoadjuvant therapy", introducing the concept in the region 10 years ago, organized and chaired the first “Women Oncology Conference” in Jordan, in addition to chairing the scientific committees of other national and regional meetings.*

Dr Al Sukhun earned her medical degree from the University of Jordan with honors, and pursued a Master of science, majoring in cancer biology from Wayne State University (WSU) in Michigan. She completed her internal medicine residency at Detroit Medical Centre, followed by postdoctoral research at WSU, while pursuing her fellowship in Medical Oncology & Hematology at Barbara Ann Karmanos Cancer Institute at WSU. She is board certified in internal medicine, medical Oncology& hematology.
Nada A. S. Al Alwan, M.D, Ph.D is a Professor of Pathology and Director of the National Cancer Research Center at Baghdad University. Dr. Alwan is the manager at the Main Training Consultative Clinic for Early Detection of Breast Cancer at the Medical City Teaching Hospital. She is the Chairperson of the Medical Committee of the Scientific Research Council in Iraq. Dr. Alwan is the Executive Director of the Iraqi National Cancer Research Program. She is a Principal Investigator of the Regional Comparative Breast Cancer Research Project.


Hamdy Azim, MD is a Professor of Clinical Oncology and immediate past chairman of the Department of Clinical Oncology, Faculty of Medicine, Cairo University. Dr. Azim chairs “Kasr Al Ainy School of Oncology” KASO "which is the educational organization within the Department of Clinical Oncology, Faculty of Medicine, Cairo University. He is the president of the Cairo Oncology Center, one of the largest private Cancer centers in the Middle East region. Dr Azim chairs the scientific committee of the NCCN Middle East chapter and is a member of numerous societies, including the ASCO, ASH, ESMO, ASTRO and the European Blood and Marrow Transplantation Society. He has been principal investigator for many multicenter clinical trials and has published more than 80 papers and he was the chief editor of 2 educational books (ASCO – PANARAB Lymphoma Conference (1999) and the MD Anderson Cancer Centre / Cairo University joint meeting (2006). Dr Azim serves as a referee for the Annals of Oncology Journal, THE BREAST, BMC Cancer, Chemotherapy journal, Advances in Cancer Research & Treatment, Journal of the Egyptian National Cancer Institute, and the Chinese Clinical Oncology Journal

Fouad Boulos, MD graduated with an MD from AUB in 2001, following which he spent an internship year in anatomic pathology at AUBMC. Then, he joined the anatomic and clinical pathology residency program (2002-06) at Vanderbilt University Medical Center in Nashville, Tennessee. This was immediately followed by a 15-month surgical pathology fellowship at the same institution with Dr. David Page, a leading figure in surgical pathology, particularly breast pathology. Dr. Boulos is certified by the American Board of Anatomic and Clinical Pathology. Dr. Boulos' research interests include the epidemiology of breast cancer in Lebanon, as well as atypical and premalignant breast lesions, and sentinel lymph node biopsy, among others.
Mahmoud El-Tamer, MD is trained as a breast surgeon with 25 years of experience caring for patients with breast cancer, and works collaboratively with other breast cancer specialists on Memorial Sloan-Kettering Cancer Center’s multidisciplinary breast cancer disease management team. Dr. El-Tamer received his MD from the American University of Beirut in 1981. He completed his residency at the American University of Beirut Medical Center in 1985, followed by four years of surgical oncology and reconstructive surgery at Memorial Sloan-Kettering Cancer Center. After his training, Dr. El-Tamer became interested in joining these two disciplines to provide improved care to breast cancer patients, and has developed a special expertise in this growing field of oncoplastic surgery.

Dr. El-Tamer’s research interests have covered different aspects of breast cancer and quality of care in surgery. He has been the principal or co-principal investigator on research grants from the Avon Breast Cancer Foundation, the United States Veterans’ Administration, and the American College of Surgeons. His current research interests are focused on tumor micro-environment post mastectomy radiation in 1–3 positive nodes and breast conservation. Dr. El-Tamer has recently published “Principals & Techniques in Oncoplastic Breast Cancer Surgery”, a textbook to help other surgeons enhance cosmetic results while performing surgery to treat breast cancer. Dr. El-Tamer holds the patent to a new agent for sentinel node detection.

Fadi Sami Farhat, MD is the Head of the Haematology-Oncology Division at Hammoud Hospital University Medical Center. He is also an attached physician at the Hotel Dieu De France and Mount Lebanon University. Dr. Farhat is certified by the European Society of Medical Oncology. He graduated from University of Zaporojie - URSS and did his training at University of Paris. He was part of several research studies:

3. Investigator of a randomized phase II trial evaluating different schedules of CPT11 combined with efusional or bolus 5FU/FA as a front line therapy for advanced colorectal cancer, Rhone-Poulenc Rorer. Hammoud hospital, Sidon, Lebanon, 1998.

Fady Geara, MD, PhD is a Professor and Chairman at the Department of Radiation Oncology and the Founding Director of The Naef K Basile Cancer Institute (2007-2012) at the American University of Beirut Medical Center, Beirut, Lebanon Education 1994 American Board of Radiology; Radiation Oncology 1993 University of Paris XI, France, Ph.D. in Radiation Biology (Research conducted at MDACC, Houston TX) 1989-93 Clinical and research fellowship in radiation oncology; The University of Texas MD Anderson Cancer Center, Houston USA 1990 University of Tours, France, Radiation Oncology Diploma. 1989 University of Paris XI, France, Masters of Science Degree in Radiobiology. 1985 University of Paris XI, France, Medical Doctor Degree Academic Experience & Service • Assistant Professor, Department of Radiation Oncology, The University of Texas, M. D. Anderson Cancer Center, Houston, Texas, 1994-97. • Faculty Associate, Department of Radiation Oncology, The University of Texas, M. D.
Continuing Medical Education Office

Anderson Cancer Center, Houston, Texas, 1993-94. • Clinical Fellow, Radiation Oncology, The University of Texas, M.D. Anderson Cancer Center, Houston TX, 1991-93. • Visiting Scientist, Experimental Radiation Oncology, The University of Texas, M.D. Anderson Cancer Center, Houston TX, 1989-91. • Resident in Radiation Oncology, at the Institut Gustave Roussy (Villejuif), University Hospital Henri Mondor (Creteil), and University Hospital Bretonneau (Tours), France, 1985-89. Board Certifications American Board of Radiology; Radiation Oncology Question item writer for the American Board written examination (1996-1997) Areas of Interest Clinical Interest: General Radiation Oncology, Radiation Biology Procedures: Conformal 3D Radiation therapy, Stereotactic radiosurgery and Radiotherapy; High dose rate brachytherapy.

Marwan Ghosn, MD, acquired his medical degree and his post graduate expertise in Hematology and Oncology from Saint-Joseph University, Faculty of Medicine, in Beirut, Lebanon as well as from the University of Paris XI – Kremlin-Bicêtre and Institut Gustave Roussy Cancer Center in France. He is Chairman of the Hematology & Oncology Department and former Chairman of the Public Health department at Saint-Joseph University, Faculty of Medicine in Beirut, Lebanon. He acquired a Master in Hospital and Health Management from The Higher School of Business, ESA, in Beirut and a Master in the Quality Management of Units for Care Production (MUPS) from the University of Paris VII, Denis Diderot, France. He is currently the Director of the Cancer Center at Clemenceau Medical Center, affiliated with Johns Hopkins International in Beirut.

Professor Ghosn has also served, for more than 15 years, as Chairman of the Hematology-Oncology Department at Hotel-Dieu de France University Hospital in Beirut, where he is also currently continuing his clinical, medical and research activities. He served as President of the Lebanese Society of Medical Oncology (LSMO) and was member of the Board of the Lebanese Cancer Society (LCS) for many years. He is an active member of several National & International Scientific Organizations and Societies including the American Society of Clinical Oncology (ASCO), the American Association of Cancer Research (AACR), the European Society of Medical Oncology (ESMO), the American Society of Hematology (ASH), The European Hematology Association (EHA), the International Society of Geriatric Oncology (SIOG), Francophone d’Oncologue Médicale (FOM) and Société Franco Méditerranéenne de Cancer (SFMC).

He has also been very active as member of the Arab Medical Association Against Cancer (AMAAC). He has served on the Executive Board as representative for Lebanon for many years and was the founding Editor in Chief of the Pan Arab Journal of Oncology (PAJO). He had also active contribution to its scientific activities being Chairman and/or member of the Scientific Committee of multiple Pan Arab Cancer Congresses. He is author and co-author of more than 100 peer-reviewed articles. He also published and gave an extensive number of communications, posters and abstracts at regional and international meetings, as well as several chapters in books in the field of Medical Oncology and Health Care Management. He has also served as Editor-in-Chief of the “Cancer Letter” edited by the Lebanese Cancer Society.

Professor Ghosn has special interests in multiple areas including leadership in conducting research and clinical trials in multiple solid tumors. He has an expertise in breast cancer, urologic cancers, gastrointestinal tumors, geriatric oncology domain as well as in patients’ safety and Quality in Healthcare.
Mohamad Haidar, MD is an Assistant Professor of Clinical Diagnostic Radiology at the Department of Radiation oncology at the American University of Beirut Medical Center. He graduated with MD degree from the Lebanese University in 1995, and received Diplome Interuniveritaire des Specialites de Medicine Nucleaire from the University of Paris VII in 2000 after completion of four years of residency training in nuclear medicine. After which, he completed two years of fellowship in nuclear medicine at Bichat Claude Bernard Hospital (2000-2002) and one year fellowship at Saint Antoine Hospital Paris (2002-2003). Dr. Haidar is currently a Professor in Radioprotection at the Beirut Arab University since 2008 and Professor in Nuclear Medicine in the Lebanese University since 2009. He serves as Head of Nuclear Medicine and PET/CT department and Cyclotron Unite since 2002, Head of Nuclear Medicine Division at Rafic Hariri University Hospital since 2006, Head of Nuclear Medicine department at Sahel General Hospital Beirut since 2002, and is responsible for the Nuclear Medicine Department at Dar Al Amal since 2006. Dr. Haidar is involved in the teaching of residents and medical students, and he is one of the most experienced Nuclear radiologists in the country in the field of nuclear medicine with special skills in Positron Emission Tomography (PET) scans. His expertise will be essential for its proper utilization and the expansion of the nuclear medicine services. Dr. Haidar will be an added asset to the department and potentially KMC for his clinical expertise in nuclear medicine and imaging.

Ziad Hamdan, EMBA is an independent consultant in strategy and management with more than 12 years of international experience mainly in the telecommunication and media. He has recently joined Allianz SNA group in Lebanon to develop the Bancassurance business in Lebanon and the region. On top of his consulting services, Ziad has conducted several workshops and seminars on strategy and management and has partnered with ESA to promote and develop executive education. Ziad holds an Engineering degree delivered by INSA (France) and an Executive MBA from the ESA. Ziad is a proud active member of the Lebanese Breast Cancer Foundation.

Faek Jamali, M.D., F.A.C.S. is associate professor of clinical surgery and vice chair for clinical affairs of the department of surgery at the American University of Beirut Medical Center (AUBMC). Dr. Jamali received his M.D. degree with distinction from the American University of Beirut in 1992. He then pursued his general surgery training at the University of Connecticut integrated residency program in general surgery which he completed in 1997 and obtained American board certification in 1998. He then pursued a fellowship in surgical oncology at the University of Pittsburgh Medical Center (UPMC) followed by a fellowship in minimally invasive surgery at the IRCAD/EITS European Institute of telesurgery in Strasbourg France. He then served on faculty at John H. stroger Hospital of Cook County as well as Rush University in Chicago before joining the American University of Beirut in 2002. Dr Jamali is a fellow of the American College of Surgeons and member of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES). Dr Jamali is the surgeon Champion for the American College of Surgeons National Surgical Quality Improvement Program at AUBMC. His clinical practice focuses on surgical oncology as well as advanced laparoscopic surgery. Research areas of interest include clinical outcome research, minimally invasive digestive and solid organ surgery.
Simone Karam, RN had graduated from the Faculty of Nursing at the Universite Saint-Esprit De Kaslik (USEK) in 2003, and worked as a registered nurse at Hopital Notre-Dame De Secours, Oncology Division until 2007. Then, she pursued her career as a registered nurse at the American University of Beirut Medical Center, Bassil-In division till 2012. As of 2012, she became part of the Basile Out Chemotherapy Unit at AUBMC after which she became the clinical assistant nurse for Professor Nagi El Saghir at the Breast Center of Excellence. As of 2015, she joined the Radiation Oncology Department as a Radiation Oncology Nurse. Ms. Karam is an Ambulatory Council Member at AUBMC. Her passion to patient care and admiration to listen to them are an asset to her appreciation of the significant role a nurse can have in the life of her patients.

Ghina Khatib, RN, MPH received both her Bachelor Degree in Nursing and Masters in Public Health from the American University of Beirut. She is ANCC board certified as professional development registered nurse. She joined AUBMC in 2001 and has held the position of an Oncology Registered Nurse for seven years. Ghina excelled in providing nursing care to oncology patients and for that she received the Karen Bahdarian Award for the best oncology nurse. Currently, Ghina is fulfilling the role of Clinical Educator at the Clinical and Professional Development Center where she is responsible for: conducting learning needs assessments for oncology nurses, designing and revising educational activities, and coordinating courses, seminars, workshops educational programs both nationally and internationally.

Nagi Khouri, MD is an Associate Professor in the Johns Hopkins Medicine Department of Radiology and Radiological Science and the Department of Oncology. His area of clinical expertise includes diagnostic radiology, with a focus on breast imaging and breast cancer. He was the first to introduce image guided breast biopsies in Maryland. From 2002 to 2012, Dr. Khouri was the Director of Breast Imaging at the Johns Hopkins Hospital. He earned his M.D. degree from the American University of Beirut in 1971. Following his residency training at Johns Hopkins in 1975, he was board certified in radiology and joined the Johns Hopkins faculty as a chest radiologist. Dr. Khouri's research interests include interventional breast procedures and tomosynthesis. He was voted among the top 10 Women’s Imagery by Medical Imaging in 2006 and 2007 and he has focused his international efforts on promoting breast health for women in the Middle East and the developing world, working with governments, hospitals, medical organizations and NGOs.

Mahmoud Masri, MD, FRCS is the chairman, Department of Surgery & Surgical Oncology at King Hussein Cancer Center, graduated with MB ChB, Faculty of Medicine, Cairo University – Egypt 1974-1980, excellent with honors grades. In 1988, he had the Jordanian Board of General Surgery which followed by a fellowship from the Royal College of Surgeon, Edinburgh/UK (FRCS Ed), 1992 then Fellowship of Surgical Oncology, Glasgow University/UK, 1995. During his career life, Dr. Al Masri has taken over several positions; as a Lecturer at the Faculty of Medicine, Jordan University 1991-1993, then a Lecturer at the University of Glasgow, Department of Surgery at Glasgow Royal infirmary, UK 1993-1995. In 1995 till 2000 he worked as an assistant Professor of Surgery & Surgical Oncology, Faculty of Medicine, and Jordan University.

Dr. Al Masri is a member in the Jordan Surgical Society, Scientific Committee of General Surgery and Subspecialties, Jordan Medical Council, Jordan Oncology Society, Jordan Association against Cancer.
besides being member in the Jordanian National Chapter of MTCC (Mediterranean Task Force for Cancer Control); a program under the sponsorship of CINBO and he is a support to Syria’s national cancer strategy, feasibility studies for the Aleppo and Horns cancer center. His main interests are in Breast disease and G.I. Malignancy.

Lara Nassar, MD is an instructor at the Department of the Radiation Oncology at the American University of Beirut Medical Center. She has received the degree of Doctor of Medicine from the Lebanese University graduating the first in her class. She did her residency training in Radiology at the American University of Beirut Medical Center from 2006 till 2010. In May 2010 Dr. Nassar passed the Fellowship in the Royal College of Radiologists in UK. She joined AUBMC after finishing a clinical fellowship in Breast Imaging at the Schering Cross Hospital in London, UK.

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Laurea in medicina e chirurgia e specializzazione in Oncologia Medica presso l’Università degli studi di Milano
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Eman Sbaity, MD is an instructor at the department of Surgery at the American University of Beirut Medical Center since 2014. She has received her medical degree for “Beirut Arab University” in 2005 and did 5 years of surgery residency at AUBMC 2005-2010. During her chief resident year, she was appointed the executive chief resident. Dr. Sbaity did 1 year of breast surgical oncology training at Johns Hopkins then 1 year of clinical research at Hopkins Sidney-Kimmel breast cancer center and 1 year of surgical oncology at MSKCC where the training focused on colorectal, gastric, and retroperitoneal and soft tissue sarcomas sarcoma. She has authored and co-
authored 10 peer reviewed articles. Dr. Sbaity is certified by the European board of general surgery and is a fellow of the European Board of General Surgery. She is a member of national and international surgical oncology societies. Her Clinical interest is in breast cancer with special interest in the new “Nipple Sparing Mastectomy”, retroperitoneal and soft tissue sarcomas sarcoma, and gastric cancers while her research interest is in translational research and outcome research.

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Maha Wazne, RPh is a Hematology/Oncology Senior Clinical Pharmacist. She received her B.S Pharm from the Lebanese American University in 2011. She provides pharmacy services for the inpatient/outpatient hematology/oncology Units (Bassil Cancer Center and St Jude) at AUBMC. She is an active member in Bassil Collaborative Practice Team. She is involved in development and revision of chemotherapy order sets (solid tumors and Pediatric BMT). In addition to her areas of practice, her interests include medication safety, palliative care, and research.
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(BBCC 5)

FEBRUARY 10 – 11, 2017

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