Morgan Welch Inflammatory Breast Cancer
Research Program and Clinic Featured in Houston Chronicle

Many women not getting correct care for rare breast cancer
Study: Doctors often misdiagnose rare, aggressive form of disease

By Todd Ackerman
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Likely because of their doctors’ ignorance, many women with a particularly aggressive and lethal kind of breast cancer don’t receive the full treatment most likely to beat the disease, according to a Houston study.

M.D. Anderson Cancer Center researchers are reporting that one in three patients with inflammatory breast cancer don’t receive chemotherapy, surgery and radiation, the treatment recommended by national advisory groups. This variety of breast cancer is rare enough that it’s typically unrecognized by patients and often misdiagnosed by doctors.

The Houston Chronicle article was based on a paper that featured our own Gildy Babiera, MD, FACS, as corresponding author. The study found that roughly one in three women do not receive the standard of care for inflammatory breast cancer, of chemotherapy, mastectomy and radiation, in that order. The study, which was published in the Journal of Clinical Oncology, shows the importance of seeking out a multidisciplinary clinic, with a dedicated team, like the one at the Morgan Welch Inflammatory Breast Cancer Research Program and Clinic.

Through social media, this article spread like wild fire to reach our program staff, patient advocates, MD Anderson staff and many more. Front page coverage has provided great publicity for our inflammatory breast cancer program and clinic. We were featured again by the Houston Chronicle on September 24, 2014 with an article titled, “Inflammatory Breast Cancer a Dangerous, Aggressive Form.”

We are thrilled to see IBC information and education reach our community through the Houston Chronicle. Based on the findings from Dr. Babiera, there is a lack of understanding about the multi-disciplinary treatment plan associated with IBC. Through education and outreach, we hope to share our extensive IBC knowledge, including the need to seek out specialized, multi-disciplinary clinic.

You can read the full article by viewing this link: http://bit.ly/1rYHCSt
We have many accomplishments to celebrate this quarter! Faculty in the Morgan Welch Inflammatory Breast Cancer Research Program and Clinic have published papers, won significant awards and been invited to speak at prestigious conferences. Please join us in congratulating them on their many accomplishments.

Congratulations to the winners of the Third Annual Zeta Tau Alpha Houston Alumnae Association in Inflammatory Breast Cancer Research. The Zeta Tau Alpha Foundation has established an endowment through the Morgan Welch IBC Program to fund a fellowship in inflammatory breast cancer (IBC) research. This year, the Program will award two $750 travel grants recognizing efforts with exceptional quality of IBC research and high impact (or potential impact) for our IBC patients. Please join us in congratulating:

Jangsoon Lee, PhD

**Abstract:** A class I histone deacetylase inhibitor, entinostat, enhances lapatinib efficacy in both HER2-overexpressing inflammatory and non-inflammatory breast cancer cells through FOXO3-mediated Bim1 expression

**Authors:** Jangsoon Lee, Chandra Bartholomeusz, Gabriel Hortobagyi, Peter Ordentlich, Naoto Ueno

Xiaoping Wang, PhD

**Abstract:** Src pathway mediates cancer stem cells through Notch signaling in inflammatory breast cancer

**Authors:** Xiaoping Wang, Hiroko Masuda, Wendy Woodward, James Reuben, Ricardo Alvarez, Vicente Valero, Naoto Ueno
Bedrich Eckhardt, PhD, has recently celebrated his first publication. His paper ‘BMP4 Inhibits Breast Cancer Metastasis by Blocking Myeloid-Derived Suppressor Cell Activity’ was recently published in the Cancer Research journal. Cancer Research publishes pieces offering significance and broad impact to a diverse audience; Cancer Research is the most frequently cited cancer journal in the world! In Dr. Eckhardt's paper, he and his team identified a gene (bone morphogenic protein-4, BMP4) that can inhibit the spread of triple negative breast cancer in preclinical models. Importantly, they show that BMP4 can inhibit metastasis by blocking the ability of the tumor to communicate with the bone leading to MDSC mobilization. Within the primary tumor, BMP4 repressed NFkB signaling (a pro-inflammatory pathway) leading to the down regulation of a granulocyte colony stimulating factor (GCSF), a key factor that enables MDSC mobilization. Finally, they demonstrate an inverse correlation between BMP4 and GCSF expression in human breast tumor tissues, which suggests that these genes are fundamentally linked in clinical samples. Collectively, our results identify a novel molecular mechanism that controls how breast cancer cells can co-opt normal biological processes to aid their spread to lung and bone.

Bisrat Debeb, DVM, PhD received a Young Investigator Award from the 4th Annual Brain Metastases Research and Emerging Therapy Conference that was held at Marseille, France on September 19-20, 2014. The Young Investigator Award provides funding to promising investigators to encourage and promote quality research. Dr. Debeb was recognized for developing novel brain metastasis preclinical models from HER2-overexpressing and triple-negative inflammatory breast cancer cells, and for his discovery that the miR-141, a tiny RNA molecule, is a key regulator of brain metastasis from breast cancer. Turning off miR-141 significantly reduces the incidence of brain metastasis, while turning on miR-141 significantly enhances the incidence of brain metastasis in preclinical brain metastasis models. Furthermore, Dr. Debeb has shown that miR-141 is associated with poor brain metastasis free survival in the serum of patients with metastatic breast cancer.
Quarterly Oral Presentations

A class I histone deacetylase inhibitor, entinostat, enhances lapatinib efficacy in HER2-overexpressing breast cancer cells through FOXO3-mediated Bim1 expression  
Jangsoon Lee, PhD  
Breast Medical Oncology

Targeting Cox-2 and rank pathways in aggressive breast cancers: Inflammatory breast cancer and triple-negative breast cancer  
Monica Reyes  
Breast Medical Oncology

IBC Treatment Algorithm
Natoto Ueno, MD, PhD  
Breast Medical Oncology

Breast Cancer Immunotherapy
Elizabeth Mittendorf, MD, PhD  
Surgical Oncology

Biobanking related issues of Inflammatory Breast Cancer: Current status and potential future advances  
Savitri Krishnamurthy, MD  
Pathology

Inflammatory invasive lobular carcinoma  
Gary Whitman, MD  
Diagnostic Radiology

Current Clinical Trials

2008-0372  
Phase II Panitumumab, Nab-paclitaxel, and carboplatin HER2- IBC

2010-0842  
A phase I Entinostat and Lapatinib + Herceptin HER2+ MBC failed Herceptin

2006-1072  
IBC Registry

2011-0930  
Randomized phase II double blind study of VPA vs. placebo to shorten time of indwelling pleural catheter

Current Lab Studies

PA12-0453  
EpCAM-CTC-EMT

PA12-0728  
TIL for TNBC and IBC

PA12-0860  
Assessing feasibility of sentinel lymph node increase dissection in IBC

PA12-0097  
Prognostic Utility of CTCs Assessed by Adnagen Technology and Clinical Outcome of Patients with Stage III Breast Cancer

If you are interested in learning more about our clinical trials, or lab studies, please email the Morgan Welch Inflammatory Breast Cancer Research Program and Clinic directly at ibcp@mdanderson.org.

We are happy to provide general information and eligibility guidelines for our clinical trials and lab studies.