34th Annual San Antonio Breast Cancer Symposium (SABCS)
By Barbora Stankova

December is a terrific time to visit San Antonio. The city has a beautiful ambience, delicious food, great music and the Christmas lights display on the world-famous Riverwalk. But as much as I appreciate San Antonio’s southern charm, for me there is something even more exciting – the annual San Antonio Breast Cancer Symposium (SABCS), the world’s most important breast cancer conference.

In December of 2011, over 8,000 breast cancer researchers, clinicians and advocates from all over the globe came to the 34th Symposium with the single goal of sharing the most recent research findings in the field of breast cancer. The Symposium symbolizes hope in my mind. Hope for the millions of people all over the world battling the disease. Hope in the form of better treatments, and hope that we are going to find the cause of breast cancer and eradicate the disease for good!

Thanks to the Breast Cancer Care & Research Fund’s scholarship, I had the opportunity to attend the 2011 SABCS as a patient advocate, along with Michele Rakoff (Executive Director, BCCRF), Debbi Knauft (Survivor, Breast Cancer Advocate and LA/SoCal Troop Organizer of the Love/Avon Army of Women) and Bryan Faust (Breast Cancer Advocate). My connection to breast cancer is a professional one. I currently work on two studies being conducted jointly by UCLA and the Breastlink medical group, *The Experience of Endocrine Therapy in Women Diagnosed with Breast Cancer* and *Women’s Experience during the Year after Breast Cancer Diagnosis* under the leadership of true experts in their fields, Annette Stanton, PhD, of UCLA and James Waisman, MD, of Breastlink.

The Symposium can be overwhelming for first-timers simply by virtue of how much it has to offer. That is why all three first-timers (Debbi, Bryan and I) who came on the BCCRF scholarship appreciated coming with Michele Rakoff, who is a true insider. Michele helped us sort through the programs and generously kept answering our endless questions.

The San Antonio Breast Cancer Symposium (SABCS) is a joint presentation of the Cancer Therapy & Research Center at the University of Texas Health Science Center at San Antonio, the American Association for Cancer Research, and Baylor College of Medicine. The SABCS of 2011 spanned over five days. It started with Tuesday afternoon educational sessions and continued for three days with the heart of the meeting, featuring six general sessions of oral presentations and five poster sessions with selected poster discussions, intermixed with award lectures, invited plenary talks, mini-symposia, clinical and basic science forums, case discussions, and two special reports. Saturday morning featured “The Year in Review”, one of the most popular parts of the program, where a panel of distinguished speakers provided a report and synthesis of major developments in breast cancer during 2011. Organizers also introduced a brand new feature – poster sessions about ongoing trials with the goal of encouraging patient enrollment, stimulating collaboration, noticing overlapping efforts and identifying unexplored areas where original research might be needed.

The presentations were overwhelmingly excellent, thanks to the Program Planning Committee and the Abstract Review Committee who worked all year to determine the focus of the meeting and selected from the thousands of submitted abstracts the ones that most represented the cutting edge of breast cancer research. Particular presentations were anticipated with great excitement for their potential immediate clinical implications and possible changes in the standard of care in the near future. These
included talks on the extended possibilities for bisphosphonates in the adjuvant setting, clinical trials of new agents in breast cancer (such as everolimus) and the latest work on the optimal use of endocrine therapy.

Michael Gnant, MD, of the Medical University of Vienna and the lead investigator on the ABCSG-12 trial (the Austrian Breast and Colorectal Cancer Study Group) presented the long-term follow-up demonstrating that premenopausal women with endocrine receptor positive early breast cancer who receive Zoladex (goserelin) plus Tamoxifen or Arimidex (anastrozole) might benefit from the addition of the bisphosphonate Zometa (zoledronic acid). The trial, which recruited more than 1,800 patients between 1996 and 2003, lends support to the anticancer benefits of adjuvant zoledronic acid. Both the disease-free and overall survival metrics were highly significant. Benefits were most pronounced in patients with a low-estrogen environment (ovarian suppression and age over 40). Encouragingly, these results are consistent with the findings of two other trials, ZO-FAST (Zometa-Femara Adjuvant Synergy Trial) and AZURE (Adjuvant Zoledronic Acid to Reduce Recurrence). The safety profile was associated with arthralgia, fever and bone pain; no cases of osteonecrosis of the jaw or renal failure were reported. James Ingle, MD, the invited discussant for this paper, noted that “although further subset analyses remain to be done and provocative questions remain to be answered, zoledronic acid may henceforth be considered standard of care for appropriate patients.”

There was encouraging news in regard to metastatic breast cancer. Metastatic breast cancer means that the disease has spread beyond the breasts and lymph nodes. A particular problem in the metastatic setting is drug resistance, a situation when the disease does not respond to chemotherapy and endocrine regimens anymore.

Two separate trials, BOLERO 2 and CLEOPATRA, address the problem of drug resistance in metastatic breast cancer. Results of these two studies indicate that combination treatments might overcome or reduce drug resistance. “These two studies address about 80% of metastatic breast cancers,” noted Dr. Ben Ho Park, an associate professor of oncology at Johns Hopkins University School of Medicine, who was not involved in these trials.

The BOLERO 2 results indicate that postmenopausal women battling metastatic hormone receptor positive breast cancer might do better on combination therapy than on single hormonal treatment. Once metastatic disease develops, hormonal agents (drugs) are often the treatment of choice since hormonal regimens allow for high quality of life in the metastatic setting relative to the other treatment options. However, metastatic breast cancer tends to develop resistance to hormonal agents.

Researchers discovered that metastatic breast cancer gets around hormonal medications by activating certain signaling pathways within the cell. One of the most frequent and important signaling pathways in this context is the so called mTOR. There is a drug called Afinitor (everolimus) which blocks the mTOR pathway. Afinitor has been used for treatment of certain kinds of kidney and brain tumors. Afinitor’s ability to disable this important pathway lead Gabriel Hortobagyi, MD, and his colleagues at MD Anderson to hypothesize that adding Afinitor to a hormonal agent could address drug resistance in metastatic breast cancer.

BOLERO 2 enrolled 724 women whose disease developed resistance to aromatase inhibitors Arimidex (anastrozole) and Femara (letrozole). The experimental group was given the hormonal drug Aromasin (exemestane) in combination with Afinitor (everolimus) and the control group received Aromasin and a placebo.
After one year, women taking Aromasin plus Afinitor had on average 7.4 months of progression free survival – more than two fold the progression free survival of women on Aromasin alone. It remains to be seen whether this combination therapy is going to help women live longer. Overall survival is the gold standard for judging the benefit of a cancer drug.

Both Aromasin and Afinitor used in the BOLERO 2 trial are FDA approved. This means that doctors could prescribe the kidney and brain tumor drug Afinitor for breast cancer right away as an “off-label” use. Dr. Vered Stearns, co-director of the breast cancer program at Johns Hopkins University School of Medicine, confirmed “oncologists are familiar with this drug and know it’s available.” However, Stearns warned that “many insurance companies ask for diagnosis as well.” As Afinitor is presently approved only for kidney cancer and kidney transplants, the question on everyone’s mind is whether the insurance companies will pay for Afinitor prescriptions in the metastatic breast cancer setting.

The CLEOPATRA trial aimed to address the problem of drug resistance in a particular type of breast cancer, where the Her-2/neu protein drives the tumor proliferation. Her-2/neu positive tumors represent about 25% of all breast cancers and tend to display more aggressive growth and spread.

There is a drug on the market called Herceptin (trastuzumab) which typically gets paired with chemotherapeutic agents. Herceptin disables tumor growth by binding to the Her-2/neu protein and represents a real breakthrough in our battle against breast cancer. Unfortunately, at times breast cancer develops resistance to Herceptin.

The CLEOPATRA trial enrolled 808 women. The experimental group was given a standard therapy of Taxotere and Herceptin (docetaxel and trastuzumab) plus the experimental drug pertuzumab. Pertuzumab binds to a different part of the Her-2/neu protein. The control group received the standard therapy of Taxotere and Herceptin plus a placebo.

The results were dramatic. The lead researcher, Jose Baselga, MD, PhD, professor at Harvard Medical School and Associate Director of the Massachusetts General Hospital Cancer Center, announced that “CLEOPATRA demonstrated clinically meaningful improvements. Progression free survival increased by 6.1 months (from 12.4 months for women on standard therapy), and was consistent across subgroups.”

Genentech, the manufacturer of pertuzumab, has applied for FDA approval. However, overall survival outcomes have not yet been fully analyzed because the data is not yet mature. As noted with the BOLERO 2 trial, overall survival serves as the gold standard in judging a cancer drug’s benefit.

A case in point, Avastin (another drug developed by Genentech) demonstrated benefit in progression free survival of breast cancer patients and secured FDA approval. However, further studies indicated that there was no increase in overall survival for breast cancer patients and FDA responded by withdrawing its approval for Avastin in this indication. The drug remains approved for other cancers.

Attending the San Antonio Breast Cancer Symposium was an amazing experience. I wholeheartedly agree with Lisa Donley, the psychotherapist of the Breastlink medical group, that “San Antonio charges you up for the whole year to follow.” I strongly encourage every woman interested in breast cancer advocacy to consider attending the Symposium. Breast cancer advocates play a critical role in breast cancer care by educating patients and their communities, participating in the trial design process and lobbying. Furthermore, women interested in this path do not have to have science background!
There are multiple opportunities to attend educational programs (for example BCCRF’s lectures, Project LEAD and others) and learn step by step the science and politics of breast cancer. As the National Breast Cancer Coalition set forth the ambitious goal of eradicating breast cancer by 2020, we need you! If you are interested in breast cancer advocacy, contact the BCCRF at www.bccrf.org and join us in the fight against breast cancer today!