

### Novelties in the treatment of breast cancer: Report from 35th San Antonio Breast Cancer Symposium 2012

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Sremska Kamenica, Serbia The 35th 2012 CTRC-AACR San Antonio Breast Cancer Symposium titled An international scientific symposium for interaction and exchange among basic scientists and clinicians in breast cancer was held in San Put doktora Goldmana 4, Antonio, USA from December 4-8, 2012. This meeting gathered 8000 participants from all over the world at the premises of the Henry B. Gonzales Convention Center. A group of ten oncologists from the Institute of oncology of Republic of Serbia, Belgrade, Clinical Center Bezanijska Kosa, Belgrade, Clinical Center, Kragujevac and Oncology Institute of Vojvodina, Sremska Kamenica represented our country.

> The First Annual San Antonio Breast Cancer Symposium was held November 11, 1978 during Breast Cancer Awareness Week, and was the part of an intensive 3-year outreach program of public and professional education designed to significantly reduce the death rate caused by breast cancer in San Antonio and surrounding counties.

> During the first three years, the meeting had a local character; it lasted one day and gathered participants from several USA states. In the years that follow, the meeting gained in its importance by the lecturers and attendees from all over the world and its duration was several days.

> This symposium is designed to provide state-of-the-art information on the experimental biology, etiology, prevention, diagnosis, and therapy of breast cancer and premalignant breast disease, to an international audience of academic and private physicians and researchers

Topics presented at 2012 meeting were interesting and highly up-to-date:

- · Assess newly targeted therapies and their side effects, which are available for use in patients with early stage and metastatic disease.
- Compare risk assessment models, recommendations for screening based on risk, new breast imaging techniques and available primary prevention interventions.
- · Evaluate local therapy options for operable breast cancer depending on stage and the use of neo-adjuvant therapy.
- Compare new systemic adjuvant therapy regimens, which are likely to change current practice.
- Identify patients that will benefit from evidence-based recommendations for decreasing symptoms and improving quality of life in survivors.
- · Discuss the role of oncology nurses and other healthcare providers in provision of survivorship care.

The topics were presented by leading oncology experts: Prof. Dr. Gabriel Hortobagyi, Fatima Cardoso, Martina Picart, George Sledge, and others

### Phase 3 Adjuvant Bevacizumab for Triple-negative disease

On the first day of the Symposium the results of BEATRICE clinical trial were presented. Our Oncology Institute of Vojvodina was one of the sites where the protocol was conducted and five patients were included in

the study. BEATRICE meeting was attended by the invited investigators and subinvestigators engaged in the trial, Prof. Dr. Jasna Trifunovic as a BEATRICE principal investigator and Dr. Jasna Pesic as a subinvestigator attended the meeting. BEATRICE study was related to the application of Bevacizumab for adjuvant treatment of breast cancer. VGFE-2 appeared to be a potential predictive factor unlike the level of plasma VEGF, which appeared to be neither prognostic nor predictive factor. So far, this clinical trial has not proved any benefit for the enrolled patients. Patients with triple-negative breast cancer who received 1 year of bevcizumab in addition to their post-surgical chemotherapy showed no statistically significant improvement in invasive disease-free survival compared with patients treated with chemotherapy alone. Primary results of the phase 3 BEATRICE study have proved negative.

### Ten years of tamoxifen reduces breast cancer recurrences, improves survival

ATLAS study has attracted a great attention.



More than 7.500 people from more than 90 countries attended the 2012 San Antonio Breast Cancer Symposium, where findings from the ATLAS trial were presented.

Evaluating Adjuvant Tamoxifen at 15 years: Advantage for longer treatmentin a finding that may be expected to impact the current standard care for patients receiving tamoxifen, results from International, randomized, controlled study known as ATLAS (Adjuvant Tamoxifen-Longer against Shorter) indicates clear advantage for substantially longer duration of

Previous research with the large cohort of some 7000 patients, recruited from 36 different countries, had indicated that patients who took tamoxifen for 5 years continued to receive benefits in terms of reduced recurrence and fewer deaths for years after treatment stopped. The new study examined whether patients who received tamoxifen for 10 years overall would gain additional benefit.

For some women with breast cancer, taking adjuvant tamoxifen (Nolvadex) for 10 years after primary treatment leads to a greater reduction in breast cancer recurrences and deaths than taking the drug for only 5 years, according to the results of a large international clinical trial.

Among the women who took tamoxifen for 10 years, the risk of breast cancer returning between 10 and 14 years after starting tamoxifen was 25 percent lower than it was among women who took it for 5 years, and the risk of dying from breast cancer was nearly 30 percent lower.

Overall, from 5 to 14 years after participants began tamoxifen treatment, the risk of the cancer returning and the risk of dying from breast cancer were lower in women who took tamoxifen for 10 years, compared with those who took it for 5 years.

# Breast Cancer Recurrence and Death 5 to 14 years after beginning 5 or 10 Years of Adjuvant Tamoxifen

	5 Years	10 Years
Risk of Recurrence	25.1 percent	21.4 percent
Risk of Death from Breast Cancer	15.0 percent	12.2 percent

Tamoxifen can have side effects, including hot flashes, fatigue, and an increased risk of blood clots and endometrial cancer. But there was no substantial increase in serious side effects, including endometrial cancer incidence or death, in women who took tamoxifen for the longer period, Dr. Gray reported. The absolute increased risk of death from endometrial cancer in women who took tamoxifen for 10 years versus 5 years was 0.2 percent. But, in the case of extended tamoxifen treatment, the "risks are far smaller than the benefits." - Dr Gray. Clinical evidence [premenopausal patients] shows that 10 years [of tamoxifen] is superior to 5 years," Dr. Ravdin said.

## Prolonged survival with fulvestrant in patients with advanced breast cancer

Higher – dose treatment with fulvestrant (500mg vs. 250mg) provided longer overall survival without heightened toxicity for postmenopausal women with hormone receptor-positive advanced breast cancer, in disease that had either recurred or progressed in the wake of endocrine therapy. Results from the CONFIRM trial indicated that the higher dose of the synthetic estrogen receptor antagonist was associated with a statistically significant and clinically relevant 4.1-month difference in median overall survival, together with a 19% reduction in risk of death.

### Lobular carcinoma and letrozole: Data from BIG study

BIG study researchers now report their efforts to examine their data from the perspective of treating patients with lobular carcinoma, while taking into consideration distribution of luminal A and Luminal B subtypes. Results thus far indicate that the magnitude of benefits that letrozole provides as adjuvant therapy in these cases varies by histology and ER subgroup. A greater overall survival advantage for letrozole over tamoxifen was noted for patients with invasive lobular than for invasive ductal carcinoma.

Results suggest that adjuvant letrozole shows greater benefit for patients with a luminal B tumor, whether the histological subtype qualifies it as classic lobular or ductal carcinoma. Results also indicated letrozole is associated with statistically significant reductions in events that threaten disease-free and overall survival for both lobular and ductal carcinoma. One of the most interesting topics of the Symposium was the neoadjuvant therapy for breast cancer - a new treatment approach. The response to applied neoadiuvant therapy appeared as a surrogate for overall survival and disease free survival among breast cancer patients. The therapy can be administered to eligible patients with HER2+, triple-negative breast cancer, etc. Core biopsy of the tumor is mandatory before initiation of the therapy and it should be redone after a number of therapy cycles, as well as the assessment of proliferative expression of Ki-67. It is important to individualize neoadiuvant therapy for each patient in order to define the best chemotherapy, hormonal therapy, target therapy, and their combination. It is recommended to do PET scan before therapy beginning.

#### Adjuvant Trastuzumab: Longer Duration, No Additional Benefit

One year of adjuvant trastuzumab remains the standard of care for patients with HER2-positive early-stage breast cancer. Prof. Goldhirsch presented the findings of je HERA study. HERA is an international, multicenter, phase 3, randomized trial in which researchers followed 5102 women with HER2-positive early-stage breast cancer. Patients were randomized to observation, 1 year of tratuzumab treatment, or 2 years of trastuzumab treatment. Data from the HERA trial, which compared the efficacy and safety of 1 year and 2 years of treatment, found no significant advantage to the longer regiment. Disease-free status and overall survival rates were comparable between the 1-and 2-year arms, after a median follow-up of 8 years. With respect to the safety profile, differences in the primary cardiac endpoint(symptomatic congestive heart failure)was comparable in both the 1-year and 2 - year arms, but the secondary cardiac endpoint (asymptomatic cardiac dysfunction) was higher in the 2-year arm, at 7.2% compared with 4.1%. Cardiac events tended to occur during trastuzumab administration and most were reversible when the drag was stopped. Finally, it confirms that 1 year of adjuvant trastuzumab should remain the standard of care in women with HER2- positive early

San Antonio Symposium 2012 was well organized and it covered many interesting topics related to breast cancer management. The topics that have not been mentioned now remain to be reported next time.