

## **Breast cancer in elderly – does guideline adherent treatment really matter?**

It is well known that breast cancer is currently the most common female cancer. Advances in diagnostics and treatment continuously improve the long term outcome. To establish a new agent or therapy a randomised study with inclusion and exclusion criterias for participating patients have been conducted. Most of the studies are conducted with 'normal' patients i.e. most patients were average aged, fit or had a certain tumor size or number of positive lymphnodes.

Once the treatment was found to be beneficial for the patients, treatment was recommended in guidelines. There are regional, national and international guidelines for the treatment of breast cancer patients. International guidelines are very similar, national guidelines on the other hand can vary depending on the availability of drugs/treatment options. Regional or local guidelines take the local situation into account i.e. no antibody treatment possible, specialised surgical skills available etc.

Now our research tries to answer the following question:

Do patients survival rates improve if treatment recommendations that are evaluated on average aged patients are used on older breast cancer patients?

Modern medicine shows that there are various subtypes of breast cancer. Each subtype demands a different primary treatment combination. Now it has been the gut feeling of many doctors that the breast cancer in elderly women is less aggressive. This has lead to a less aggressive treatment recommendation. In the first stage our data confirmed this 'gut feeling' by showing a significantly different distribution of those subtypes in elderly patients compared to average patients. This difference is mainly due to an increase of the lesser aggressive subtypes.

Guideline adherent treatment is beneficial for the survival rates of the patients. It has been reported that elderly breast cancer patients are less likely treated to be guideline adherent. Again our analysis confirmed these finding. Looking at the different subtypes and treatment options (i.e. radiotherapy, chemotherapy, surgery or anti-hormonal treatment) in more detail elderly patients were significantly less likely to receive radio- and chemotherapy in any tumor subgroup.

The disease free - and overall survival in our analysis showed a clear benefit for elderly patients that were treated 100% guideline adherent. Interestingly this benefit existed for all breast cancer subtypes in our database. Therefore it can be concluded that elderly breast cancer patients do benefit in terms of survival from a guideline adherent treatment. Even though those recommendations might be based on studies involving younger patients.

## Publication

[Tumor biology in older breast cancer patients--what is the impact on survival stratified for guideline adherence? A retrospective multi-centre cohort study of 5378 patients.](#)

Ebner F, van Ewijk R, Wöckel A, Hancke K, Schwentner L, Fink V, Kreienberg R, Janni W, Blettner M.

*Breast. 2015 Jun*