

breast cancer

F48 **Pre and post anti Her-2 therapy era: a mono-institutional analysis of the outcome in patients with residual disease after neoadjuvant therapy for Her-2 positive locally advanced breast cancer**

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Background: Anti Her-2+ therapies (aH2Tx) have changed the outcome of women with Her2 positive (Her2+) breast cancer and its activity showed a considerable impact in the neoadjuvant setting in which a higher rate of pathologic complete response (pCR) was observed. Of interest is the difference in outcome of patients who did not achieved a pCR and the analysis of the residual disease (RD) represents a relevant issue to explore to identify the subset of patients (pts) with different outcome.

Methods: 67 consecutive Her-2+ pts with locally advanced breast cancer (LABC) treated since 1993 to 2015 and who did not reached a pCR were evaluated. A minimum

of three years of follow up was requested for the outcome analysis. Overall survival (OS) and disease free survival (DFS) has been explored in the two cohorts and the type of RD after neoadjuvant aH2Tx was also examined. Immunohistochemistry expression for estrogen and progesterone receptors (ER/PR) in the primary tumor for the aH2Tx-not-receiving pts was: 8 pts was ER/PR negative, 10 were ER/PR positive, 6 were ER-/PR+, 1 ER+/PR-. In the aH2Tx-receiving group: 26 were ER/PR+, 6 were ER+/PR-, 10 were ER/PR negative.

Results: 25 pts did not receive aH2Tx in the neoadjuvant and 19 did not in adjuvant setting. 42 pts received aH2Tx in the neoadjuvant and 35 also in the adjuvant setting. Eleven pts in the aH2Tx-non-receiving group had recurrent disease compared with five recurrences in the aH2Tx-receiving group. The subtypes of RD in the aH2Tx not-receiving group were as follow: 4 had Luminal A like disease, 2 Luminal B like, 1 was triple negative, 18 were Her2+. For the aH2Tx-receiving group: 4 were Luminal A like, 5 Luminal B like, 30 were Her2+. The subtype of RD in the aH2Tx-not-receiving group with recurrent disease it has changed in 2 out of 11 pts if compared to primary tumor and in 2 out of 5 pts of the aH2Tx-receiving group.

Conclusion: Recurrent disease was observed more often in the non-receiving aH2Tx pts, the analysis of impact of RD on outcome is still pending and will be presented at the meeting. Optimizing the selection of aH2Tx by identifying subpopulations of Her-2+ pts who need more or less therapy could be cost effective and would spare some patients unnecessary exposure to ineffective treatments.