Selection Of Neoadjuvant Treatment Based On Oncotype Score In Luminal Breast Cancer

Poster Abstracts

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Goals: Neoadjuvant chemotherapy is considered an optimal option in early breast cancer, specially in HER2 positive and triple negative phenotypes, but in luminal ones remains controversial and it is necessary a more accurate selection. Oncotype RS (Recurrence Score) is a validated test to select luminal patients to receive adjuvant chemotherapy. We analyzed the possible use of Oncotype Dx to select patients to receive neoadjuvant chemotherapy.

Methods: Between January 2016 and September 2018, 77 consecutive patients with breast cancer, considered candidates to receive chemotherapy based on clinical variables such as initial tumor size or lymph node involvement. Oncotype Dx test was performed and we analyzed the score results and its correlation with response.

Results: Median age was 55 (range 32-84), median tumor size was 36,78 mm (20-100) and 44 tumors (55,7%) had initial node involvement. Median estrogen expression was 259 histoscore, progesterone of 111 and median ki67 of 32%. Obtained Oncotype RS was: median of 23 (6-76); 6 (7,8%) of low risk (RS <11), 52 (67,5%) intermediate (RS 11-30) and 19 (24,7%) high (RS >31). According new threshold of 25; 48 (62%) were low risk and 29 (38%) high risk. Final neoadjuvant chemotherapy was administered in 50 patients (63%); the 27 last patients undergo surgery; however 5 patients received adjuvant chemotherapy due to major node involvement. Pathologic response in 46 patients after neoadjuvant chemotherapy was: 5 with RCB-0 (9,8%); 8 RCB-I (15.7%); 13 RCB-II (25,5%) and 20 RCB-III (39,25). Highest histological response (RCB-0 + RCB-I) was observed in 38,5% (10/26) of RS>25 and 15% (3/20) of RS<25.

Conclusions: Recurrence Score by Oncotype Dx could be a useful tool to select neoadjuvant chemotherapy in luminal breast cancer. Neoadjuvant chemotherapy could be avoided in 37% of patients; however, still a 6,5% (5/77) of patients will need adjuvant chemotherapy because of nodal involvement despite of low risk RS. Major responses are observed in patients with RS > 25 (38,5%).