First-line treatment for endocrine sensitive bone-only metastatic breast cancer: Is more always better?

Toss A, Venturelli M, Sperduti I, Isca C, Molinaro E, Barbieri E, Piacentini F, Omarini C, Cortesi L, Cascinu S, Moscetti L Azienda Ospedaliero - Universitaria Policlinico di Modena, Modena, Italy; IRCCS Regina Elena National Cancer Institute, Roma, Italy

The standard first-line for endocrine sensitive metastatic breast cancer (BC) is represented by endocrine therapy. Several phase III clinical trials searched for more effective endocrine strategies. Nevertheless, the use of combinations for the first-line treatment of bone-only disease (BoD) is widely discussed, due to its indolent course. Our meta-analysis aims to explore the role of new endocrine strategies in BoD.

A systematic review of electronic databases was conducted to identify the phase III clinical trials comparing the standard AI to novel experimental strategies. The hazard ratios (HR) for PFS were pooled in a meta-analysis. The heterogeneity of the data was evaluated by Chi-square Q test and I2 statistic.

8 studies were included in the analyses. 4 trials explored the role of CDK4/6 inhibitors (Monaleesa2 and 7, Monarch3 and Paloma2), 2 trials analyzed Fulvestrant + AI (SWOG and FACT), one trial studied Fulvestrant monotherapy (FALCON), while one trial evaluated the association between Bevacizumab and Letrozole (ALLIANCE). 6 trials reported data regarding the BoD, while 2 trials included the BoD in the non-visceral disease. Overall, the meta-analyses showed a PFS advantage for the experimental arms [HR 0.70 p 0.012], with a significant moderate/high heterogeneity [I2 66.48% p 0.004]. Only the FALCON and Paloma2 showed a significant improvement in PFS, respectively for Fulvestrant and Palbociclib + Letrozole. Considering only trials reporting data for BoD, the experimental arms significantly improved the PFS [HR 0.66 p 0.005], with a low/moderate non-significant heterogeneity [I2 44.95% p 0.106].

The novel strategies showed to be able to improve the PFS of BoD. Nonetheless, only Palbociclib + Letrozole provided statistically significant data of advantage in this setting. In clinical trials, BoD is often included in the non-visceral disease subgroup. Future clinical trials should take into account the differences in natural history and better prognosis of BoD, in order to define the best approach to these patients.

Session: Poster Session 1: Treatment: Bone Metastases (5:00 PM-7:00 PM)

Date/Time: Wednesday, December 5, 2018 - 5:00 pm

Room: Hall 1