

Use of trastuzumab in HER2-positive metastatic breast cancer beyond disease progression: a systematic review of published studies

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ABSTRACT

Aims and background. Trastuzumab, a humanized monoclonal antibody directed against the extracellular domain of ErbB, has determined clinical benefit for women affected by metastatic or early stage HER2-positive breast cancer and never previously treated with trastuzumab. Trastuzumab is generally used as first-line treatment of HER2+ metastatic breast cancer and is currently administered beyond progression even without clear evidence supporting such clinical practice. In fact, HER2-positive metastatic breast cancer has a high risk of progressing after first-line therapy, and second-line treatments vary. The aim of the study was to investigate by a systematic review the efficacy of trastuzumab-based treatments beyond progression in HER2-positive metastatic breast cancer.

Materials and methods. We performed a systematic review using Medline, Embase and Cochrane Library data bases and publications in principal meetings or congresses of oncology in Europe and America until September 2008. The main selection criterion was the reporting of time to progression, calculated from the start of each trastuzumab-based therapy to the date of progressive disease or death.

Results. Twelve studies were selected that included a total of 516 patients. The weighted mean time to progression was 23.66 weeks (standard deviation, 4.37) and the median was 26 weeks (range, 13-39). Interestingly, combined trastuzumab plus vinorelbine treatment showed a lower mean and median time to progression (20.59 and 19.57 weeks, respectively), whereas trastuzumab plus capecitabine yielded a mean time to progression of 30.33 weeks.

Conclusions. The added value of the present study has been to provide a quantitative summary measure of time to progression which can be used for comparisons between current and future available regimens. Free full text available at www.tumori-online.it

Key words: beyond progression, Herceptin, metastatic breast cancer, trastuzumab.

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