Analysis of the use, effectiveness and safety of treatment with trastuzumab-emtansine in metastatic breast cancer

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BACKGROUND
Trastuzumab-emtansine (TDM1) is designed to inhibit the HER2 pathway and directly release DM1 chemotherapy inside HER2-positive cells.

PURPOSE
To analyze the use, progression-free survival (PFS) and adverse drug reactions (ADRs) in patients with metastatic breast cancer treated with TDM1.

MATERIAL AND METHODS
Retrospective observational study including all women treated with trastuzumab-emtansine from March to October 2014. To obtain data, a review of the electronic medical record (XXI® Mambrino) was performed and analyzed using SPSS program. The variables were age, line of treatment, ADRs and PFS. ADRs were classified according to Common Toxicity Criteria v4.0. The effectiveness variable was PFS.

RESULTS
Five women (median age of 51 years old (39-64)) were included at the beginning of the treatment. The most frequent ADRs according to their severity were thrombocytopenia G2 and enzymatic hepatic alterations G3. The rest of ADRs were mild and described in bibliography. Regarding PFS, 2 of the 5 patients have progressed, obtaining a median PFS of 6 months. The other three patients have a median follow-up of 5 months up to the actual date.

CONCLUSION
The use of TDM-1 is off-label in 2 out of the 5 cases, one in first line with a progression time higher than 6 months (10 months) and the other due to the inability to use the combination pertuzumab-trastuzumab-docetaxel by the prior taxane-induced neuropathy. The median PFS (6 months) was lower than that obtained in clinical studies (EMILIA 9.6 months, compared to lapatinib-capecitabine and TH3ERESA 6.2 months, compared to a medical treatment choice in patients who have previously treated with both trastuzumab and lapatinib). Currently 3 out of 5 patients continue with the treatment, thus, the median PFS will be modified. TDM-1 by its toxicity profile has been a safe drug in our cases.

No conflict of interest to disclose

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