Aim: Eribulin mesylate (EM) is increasingly used in locally advanced or metastatic breast cancer (MBC) treatment since its clinical efficacy and safety have been demonstrated in a pivotal phase III trial. However, its clinical efficacy and safety in a routine clinical setting need to be clearly evaluated.

Methods: Four centers participated in this retrospective clinical practice setting study (France: 3; Switzerland: 1). Inclusion extended from March 2011 to January 2014. Survival was updated on March 07, 2014. EM efficacy was evaluated using RECIST 1.1 tumor response rates (assessed every 3 cycles), time-to-progression (TTP) and overall survival (OS). Safety was evaluated using the CTCAE v4.03 scale.

Results: 258 patients were included. Median age at the initiation of EM treatment was 59 years (range 22-85). WHO Performance status was as follows: 0/1/2/3 in 28.3%, 51.6%, 17.8% and 2.3% of the patients respectively. Histological type of primary tumor was ductal in 88.4% of the cases and lobular in 8.1% (other subtypes 3.5%). 73.3% of tumors were Hormone receptor-positive, 10.1% were HER2-positive, and 22.5% were triple negative. 86.4% of patients presented with visceral metastases, mainly in the liver (67.4%). 15.9% of the patients were affected by brain metastases. Patients were heavily pretreated (4 median previous metastatic regimens; range 1-9). 84.5% of them have previously received capecitabine. Median number of cycles was 5 (range 1-19). Treatment delay was reported for only 26.7% of the patients. Treatment was globally well tolerated (grade 3-4 toxicities per patients as follow [%pts]: anemia [1.6], neutropenia [20.9], thrombocytopenia [0.4], liver dysfunction [0.8], and peripheral neuropathy [3.9]). 13 patients developed febrile neutropenia. At the time of update, with a 13.9 months median follow-up, 37.6% of the patients were still responding, 55% progressed (missing data: 7.3%). 42.3% of the patients were still alive. Median TTP and OS were 4.2 (95%CI: 2.8-6) and 11.2 (95%CI: 9.3-12.1) months respectively. One- and 2-year survival rates were 45.5% and 10% respectively.

Conclusions: In this routine MBC population, EM appears to be an effective and well tolerated drug, with clinical results close to the ones reported in the EMBRACE pivotal trial. Identification of predictive markers of EM benefit is still warranted.

Disclosure: All authors have declared no conflicts of interest.

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