LAPATINIB IN HER OVEREXPRESSING METASTATIC BREAST CANCER RESISTANT TO TRASTUZUMAB

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1.INTRODUCTION

Lapatinib is a selective double tyrosine kinase inhibitor for the inhibition of the epidermal growth factor receptor HER1 and HER2. Having more targets, his anti-tumor activity could probably be more effective. Preclinical data reveal that lapatinib has activity in trastuzumab resistant cell lines as well as synergistic activity with trastuzumab

Lapatinib is the standard treatment for HER2-positive MBC in combination with chemotherapy Capecitabine, and in combination with endocrine therapy aromatase inhibitor Letrozole.

The aim in this study to analyze progression free survival, objective response and to evaluate effectiveness safety and tolerance of Lapatinib in metastatic breast cancer HER2 positive

2.METHODS

we retrospectively reviewed all patients with HER2+ MBC or locally advanced breast cancer who received Lapatinib with chemotherapy or endocrine therapy(more than 03 cycles) between January 2017 and December 2018.

3.RESULTS

We identified 36 patients treated from January 2017 and December 2018. Median age was 55 years (range 40-71) . All patients had invasive ductal histology. All tumours were HER2+ by immunohistochemistry and 45% were HR positive. Other patients characteristics were: no prior Trastuzumab 45% (n=16), Lapatinib in first line 33% (n=12), visceral involvement 44%, combination Lapatinib with Capecitabine 50 %(n=18).
Median time of Lapatinib administration was 7 months (range 4-35).

Adverse events: G1/2: neutropenia 16%, diarrhoea G2 17%, asthenia G2 22%, Rash G1/2 22%, hand-foot syndrome G1/2 39%, LVEF "decline 10%" 11% (n=4). Efficacy: objective response rate 22%, complete response 0%, partial response 22%, Stability 39%, progression 39%.

Median progression-free survival was 13 months (95% CI: 6-19)

4.DISCUSION

Lapatinib is a potent reversible and selective inhibitor of the tyrosine kinase domains of the epidermal growth factor receptor and the human epidermal growth factor (HER) -2 receptor. It is approved for the treatment of advanced or metastatic HER-2 + breast cancer in combination with capecitabine and for hormone receptor positive breast cancer in combination with an aromatase inhibitor. Lapatinib given orally once daily is moderately to well tolerated, with rash and gastrointestinal adverse reactions being the main toxicities. In studies of the efficacy of lapatinib, direct comparisons between lapatinib and trastuzumab are lacking.

Our experience is a retrospective study with a small sample. Lapatinib with different combinations were made disease control in 61%

No severe toxicity (G3 and G4)

Progression-free survival at 13 months without

5.Conclusion

combination Lapatinib with chemotherapy improved progression-free survival , and control disease