

PURPOSE

- To describe pertuzumab utilization as Her2-positive breast cancer (BC) treatment at an oncology reference hospital.
- To analyze treatment associated costs according to its different indications.

MATERIAL AND METHODS

- We designed an observational and retrospective study of drug utilization.
- All Her2-positive BC patients treated with pertuzumab from its EMA authorization until August 2017 were included.
- Data collected from patient medical history records were age, cancer stage, lines of treatment, number of administered doses, daily dose and combined drugs for each patient were collected.
- Pertuzumab cost for each patient was calculated.
- Statistical analysis: Frequencies, mean and standard deviation (σ) were calculated, depending on the type of variable.

RESULTS

POPULATION

- 50 patients women.
- Mean age of 51.2 years [27-77].
- 16 patients (32%) were treated for metastatic disease (MD).
- 34 (68%) were early-staged patients with a neoadjuvant therapy (NAT).

NEOADJUVANT THERAPY (n=34)

- All patients received chemotherapy previously to surgery, according to the schedule.

4 Cycles / 14 days

Epirubicine 90mg/m²
Cyclophosphamide 600 mg/m²

4 Cycles / 21 days

Pertuzumab 420 mg (840 mg)
Trastuzumab 6 mg/kg (8 mg/kg)
Paclitaxel 80 mg/m² weekly

- Subsequent to the surgery trastuzumab to complete a year of therapy.

- Mean Dose Pertuzumab: 545 mg
- Mean Cycles / Patient: 3.68

METASTATIC DISEASE (n=16)

- 15 patients received pertuzumab as first-line therapy.
- 1 patient had received multiple lines of therapy previously to pertuzumab.
- The regime chosen was the triplet pertuzumab + trastuzumab + chemotherapy:
 - Paclitaxel n=8,
 - Docetaxel n=5,
 - Nab-paclitaxel n=2,
 - Vinorelbine n=1.
- Mean Dose Pertuzumab: 481 mg
- Mean Cycles / Patient: 13.6

COSTS PERTUZUMAB THERAPY

- Total incremental cost : 895,212€
 - 531,174€ for MD
 - 364,038€ for NAT
- Pertuzumab mean incremental cost per patient
 - MD : 33,198€ (σ =29,069) [6.868-107.608]
 - NAT : 10,707€ (σ =1.757) [4.579-13.737]

CONCLUSIONS

- There is a major number of neoadjuvant treatments including pertuzumab in comparison with MD treatments even though neoadjuvant indication approval was later.
- Treatment costs associated to NAT are significantly fewer as the duration of this treatment is shorter than MD.
- Incremental cost associated to pertuzumab has meant an important rise in total expenditure for the treatment of metastatic Her2-positive Breast Cancer.