



# Neoadjuvant trastuzumab and pertuzumab in real world data population in two medical institutions in Portugal.

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## Background

- For the last few years the medical community noticed that achieving complete pathological response (pCR), for HER2+ breast cancer patients, after the Neoadjuvant treatment (NAT) equates to a long-term surrogate point, which has pushed for the development of treatment strategies based of neoadjuvant use of trastuzumab and pertuzumab.
- We implemented an institutional protocol in 2018 to treat HER2+ breast cancer patients that had tumours larger than 2cm and/or axillary disease that had had included anthracyclins, taxanes, trastuzumab and pertuzumab on their NAT regimen.
- The main goal was to prospectively analyse the effect of this neoadjuvant regimen on pCR (ypT0/is, ypN0/is), as well as on how often does NAT help with breast conservation.

## Methods

- Non-randomized prospective study was performed in two medical oncology departments in Portugal.
- It included HER2+ breast cancer patients that had tumours larger than 2cm and/or axillary disease that have been being treated since 2018.
- These patients were put on the following treatment scheme: 4 cycles of doxorubicin and cyclofosfamid, followed by 12 doses of standard paclitaxel plus four standard trastuzumab and pertuzumab cycles .

## Results

		pCR	Non-pCR	Total
	No. of patients (nº patients)	23	15	38
	Mean age (range)	53 (36– 70)	55 (38-72)	
cT	T1-2	12	4	16
	T3-4	9	13	22
cN	N0	6	3	9
	N+	15	14	29
Hormonal receptor	Positive	13	15	28
	Negative	8	2	10
Ki-67	>20	17	13	30
	≤20	4	4	8
Adjuvant HER2 treatment	Trastuzumab	20	1	21
	Trastuzumab and Pertuzumab	3	1	4
	T-DM1	0	1	1
Distant recurrence		3	0	3

TABLE 1: PATIENTS CHARACTERISTICS

## Results

- Overall median age was 54 (36 – 72) yrs.
- 17 patients had stage II cancer and 21 patients stage III.
- pCR was achieved in 60,5% of the patients,.
- 57,9% of the patients received breast conservative surgery and 65,9% received axillary dissection.
- Only one patient didn’t complete the protocol by own choice and no cardiac toxicity was detected on any patient.

## Conclusion

- Our results are consistent with those published in previous studies in terms of pCR rate and toxicity, however there was a high number of axillar dissections and for that reason we are working in an institutional protocol for the management of the axillary disease after NAT.
- Long term follow up is necessary to understand the real impact of pCR and to search for predictive indicators of the response to NAT.

## References

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