Pathological response to weekly nabpaclitaxel and carboplatin followed by anthracycline regimen in triple negative breast cancer

Affiliations : Dr Sharat Chandra, Dr Manish Singhal, Dr Dipanjan Panda, Dr Shaunak Valame, Dr Atul Sharma, Dr Amarendra Amar
1 – Department of Medical Oncology, Apollo Indraprastha Hospitals – New Delhi

Indraprastha Apollo HOSPITALS
TOUCHING LIVES

INTRODUCTION

Neo adjuvant chemotherapy (NACT) should be the preferred approach in treating locally advanced breast cancer (1) .

Pathological complete response (pCR) is considered a potential surrogate marker for survival in triple negative breast cancer (TNBC), thus attracting strategies to achieve higher pCR.

Addition of carboplatin to standard neoadjuvant chemotherapy regimen has been seen to increase pCR.

METHODS

We aimed to evaluate efficacy of nab paclitaxel and carboplatin followed by dose dense anthracycline regimen by pCR in women with locally advanced tnbc/

Patients with confirmed stage 2 or 3 were included .

Hormone receptor and her 2 neu receptor status was confirmed by IHC and/or FISH .

Patients received 12 weekly nab paclitaxel 125 mg/m2 plus carboplatin AUC 2 followed by dose dense doxorubicin 60 mg/m2 and cyclophosphamide 600 mg/m2 for 4 cycles and subsequent surgery .

pCR was defined as absence of any disease in breast and axilla on surgical specimen.

Secondary end points were breast conservation rates, progression free survival and toxicities

DISCUSSION

- This was an intense regimen with weekly nab paclitaxel and carboplatin followed by Dose dense anthracyclines .
- pCR in excess of 60% was achieved which is very impressive .
- Hematological toxicity was major and seen in excess of 70% .
- Dose reduction in carboplatin to AUC 1.5 led to better tolerability .
- 25 of the 35 patients could finish the entire cycles planned .
- Regimen was well tolerated with dose modifications .
- After a median follow up of 25 months , median pfs was 68 % .

CONCLUSION

- Nab paclitaxel and carboplatin followed by anthracycline regimen as neo adjuvant regimen led to impressive pCR rate of 62.8% in our study .
- Regimen was tolerated well with necessary dose adjustments showing good response rates with a trend towards increased progression free survival .

CITATIONS

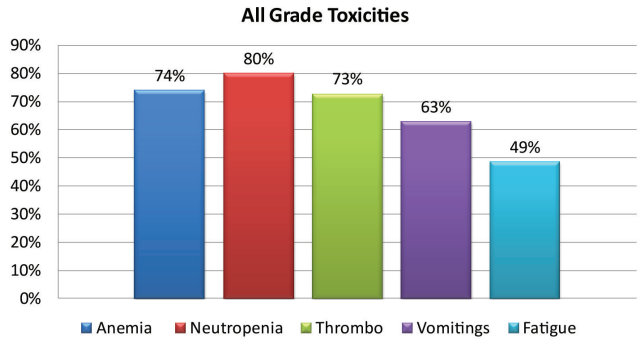
- Reyal F, Hamy A, Piccart MJ .Neoadjuvant treatment: the future of patients with breast cancer ESMO Open 2018;3:e000371. doi: 10.1136/esmoopen-2018-000371

There are no conflicts of interests in this study

RESULTS

Baseline characteristics	
No of patients	35
Median Age (Range)	48.7(27 -71)
Clinical T stage (n)	
T2	14
T3	15
T4	6
Clinical N stage(n)	
N1	16
N2	16
N3	1
Stage (n)	
2b	7
3a	22
3b	5
3c	1
Type of Surgery(n)	
MRM	14
BCS	21
Total dose completed (n)	25
Dose modifications (n)	22

Results	
Response rates	
pCR (%)	62.8
Partial response	34.2
Stable disease	2.8
Pathological tumor regression (n)	
Ypt0	23
Ypt1	11
Ypt2	0
Ypt3	1
Pathological nodal regression (n)	
Ypn0	27
Ypn1	7
Ypn2	1
Grade ¾ toxicities (n)	
Thrombocytopenia	3
Febrile neutropenia	6
Fatigue	1
Vomitings	1
Anemia	5
Peripheral neuropathy	1



Email for correspondence :
sharat.9876@gmail.com