

## TOXICITY EVENTS

	WITHOUT BOOST (71 pts)					WITH BOOST (85 pts)						
	5 days	10 days	16 days	1 month	6 months	5 days	10 days	16 days	20 days	1 month	6 months	
<b>G1</b>												
Dry Skin	0	0	0	3	0	0	1	0	1	2	1	
Hyperpigmentation	0	0	1	39	8	0	3	5	5	47	12	
Induration/fibrosis	0	0	1	3	6	0	0	0	0	3	14	
Pruritus/itching	0	0	3	2	0	1	2	3	3	2	0	
Desquamation	0	1	6	5	0	0	0	3	10	4	0	
Rash: dermatitis	6	21	42	13	0	8	30	49	51	11	3	
Teleangiectasia	0	0	0	0	0	0	0	0	0	0	0	
Skin ulceration	0	0	0	0	0	0	0	0	1	0	0	
Burn	0	0	0	0	0	0	0	0	0	0	0	
Edema	3	1	3	1	6	11	15	12	12	13	8	
<b>G2</b>												
Dry Skin	0	0	0	0	0	0	0	0	0	0	0	
Hyperpigmentation	0	0	0	1	0	0	0	0	1	2	0	
Induration/fibrosis	0	0	0	0	0	0	0	0	0	0	0	
Pruritus/itching	0	0	0	0	0	0	0	0	0	0	0	
Desquamation	0	0	0	0	0	0	0	0	1	0	0	
Rash: dermatitis	0	1	5	0	0	0	0	5	14	0	0	
Teleangiectasia	0	0	0	0	0	0	0	0	0	0	0	
Skin ulceration	0	0	0	0	0	0	0	0	0	0	0	
Burn	0	0	0	0	0	0	0	0	0	0	0	
Edema	0	0	0	0	2	0	0	0	0	1	0	

**Conclusion:** Administration of an additional HB is feasible, safe and well tolerated in terms of acute and short-term late skin and subcutaneous toxicity even though it seems to have a role in the edema occurrence. Although G2 dermatitis occurred in 16.47% of pts receiving HB vs 7.04% not receiving it, the difference was not significant, probably due to few observed events. Long term follow up data and a larger sample size are needed to confirm these data, assess late toxicity and clinical outcomes.

### EP-1190

**Boost volume assessment in breast cancer: preop tumor volume vs clips used in oncoplastic surgery**

A. Altinok<sup>1</sup>, M. Doyuran<sup>1</sup>, M. Caglar<sup>1</sup>, D. Canoglu, (1), E. Kucukmorkoc<sup>1</sup>, H. Acar<sup>1</sup>, N. Kucuk, (1), H. Caglar<sup>1</sup>  
<sup>1</sup>Medipol University, Radiation Oncology, Istanbul, Turkey

**Purpose or Objective:** The aim of this study was to compare the volumes obtained with surgical clips during breast conserving surgery of breast cancer patients with volume determined using FDG positive tumor volumes outlined in pre-operative PET-CT imaging and find out the deviations that arise.

**Material and Methods:** For initial diagnostic PET-CT requested by the surgeon, the patients were positioned on the breast board with the arm on the ipsilateral side up. Those without metastatic tumors and applicable for breast conserving surgery went under operation in compliance with oncoplastic surgery principles. 4 clips were placed at the tumor lodge. For 15 of the patients, before continuing with further therapy, the tumor volume outlined with the surgical clips and that contoured using the area with FDG affinity viewed on the PET-CT were determined. Results were statistically analyzed with SPSS software.

**Results:** This study determined that methods used in oncoplastic surgery (such as flap shifting) resulted in displacements of the tumors from their original locations. For statistics we apply paired t test to the results that we have from these different techniques and found the values respectively for x,y,z as 0.929, 0.119, 0.991. Even the p value that we found is higher than 0.05 and not seems to be significant when we evaluate the center of mass deviation that we measure with these two techniques makes us to have an impact in overall results.

**Conclusion:** Determination of boost volume using pre-op tumor volume is not trustable in cases where tumor volume is not marked using clips during oncoplastic surgery of breast cancer and may result in geographical misses.

### EP-1191

**Pattern of metastasis in different molecular sub-types of locally advanced carcinoma breast**

A.D. Sharma<sup>1</sup>, J. Poddar<sup>1</sup>, S. Patel Shah<sup>1</sup>, U. Suryanarayan<sup>1</sup>, M. Mehta<sup>1</sup>, P. Nandwani Patel<sup>1</sup>, J.P. Neema<sup>1</sup>, A. Parikh<sup>1</sup>, R.K. Vyas<sup>1</sup>

<sup>1</sup>GCRI, Radiation Oncology, Ahmedabad, India

**Purpose or Objective:** To investigate the association between the molecular sub-types and the pattern of distant metastasis in carcinoma breast.

**Material and Methods:** 400 patients of locally advanced breast carcinoma, without any distant metastasis, both clinically or by imaging were studied retrospectively. (Jan 2010- Dec 2011) The ER/ PR and HER-2neu status of the patients was noted and the patients were classified into luminal A/B, Triple negative, Her2/neu enriched and Luminal/Her.

All patients had received the treatment for carcinoma breast as per the standard protocols i.e. Curative treatment with surgery, Chemotherapy, and radiotherapy followed by hormonal therapy as per the indications.

All the patients were followed up for local as well as distant failure and pattern of failure was co-related with the molecular subtypes.

The major sites of distant metastasis were lungs, liver, bones and brain.

molecular subtypes    bone    Liver    Lungs    brain    local recurrence

Luminal A/B                    16/30    10/30    2/30    6/30    4/30

Her 2 Neu enriched    28/66    30/66    20/66    20/56    18/56

Luminal Her                    16/28    11/28    2/28    8/28    6/28

Triple Negative                7/19    6/19    7/19    4/19    0/19

**Results:** Brain was the most common site of metastasis in Her 2 /neu enriched subtype.

Bone is the most common site of metastasis in all subtypes

**Conclusion:** A strong association of different metastatic sites with the molecular status suggests vigilance about the symptoms (metastatic) beforehand. Organ specific metastasis may depend on the molecular subtype of the cancer. High rate of bone metastasis might be due to the role of bone marrow as a homing organ for the cancer cells. Early treatment of Her-2/ neu patients with Trastuzumab might reduce the rate of metastasis. Tailored strategies against distant metastasis concerning the molecular subtypes in breast cancer may be considered.

### EP-1192

**Management of the axilla after neoadjuvant systemic therapy in breast cancer: A systematic revision**

A. Manterola<sup>1</sup>, G. Asin<sup>1</sup>, F. Arias<sup>1</sup>, M. Errasti<sup>1</sup>, M. Barrado<sup>1</sup>, M. Campo<sup>1</sup>, I. Visus<sup>1</sup>, M. Dominguez<sup>1</sup>

<sup>1</sup>Complejo Hospitalario de Navarra, Oncol Radioterápica, Pamplona, Spain

**Purpose or Objective:** Worldwide, breast cancer is the most common invasive cancer in women. The management of breast cancer depends on multiple factors. The purpose of this work is review the currently management of the axilla after neoadjuvant systemic therapy in breast cancer especially from the point of view of an oncology radiotherapist

**Material and Methods:** In May 2015, we searched clinical trial registers, the Cochrane Central Register of Controlled Trials, Web of Science, EMBASE and MEDLINE and reviewed reference lists. Further hand searches were conducted of relevant journal proceedings. At the end, we principally reviewed both meta-analyses regarding the results of the SNB following NAC in patients with a diagnosis of clinically negative axillae, the results of NSABPB-18 and NSABP B-27