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
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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. For initial diagnostic PET-CT imaging done in the early 2000s, the patients were positioned with the arm down. The patients were marked using clips during oncoplastic surgery (such as flap shifting) resulted in geographical misses. Those without metastatic tumors and applicable for breast conserving surgery went under operation in compliance with the breast board with the arm on the ipsilateral side up. For initial diagnostic PET-CT imaging done in the early 2000s, the patients were positioned with the arm down. The patients were marked using clips during oncoplastic surgery.

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
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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-2/neu 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. Cuarative 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 review
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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 NSABP-B-18 and NSABP B-27