cosmetic outcome was good/excellent in 94% of patients. At one year skin toxicity was G1 in 13% of patients, 1 patient G2, 1 patient G3; cosmetic outcome was good/excellent in 93% of patients.After an early evaluation of clinical outcomes we have found 12 cases of progression disease, only one patient had an In-Breast-Recurrence.

Conclusion: The 3-week course of postoperative radiation using VMAT with SIB was well tolerated in acute and early late settings. Long-term follow-up data are needed to assess late toxicity and clinical outcomes.

PV-0512

Accelerated partial breast irradiation for Luminal-A breast cancer: analysis from a phase 3 trial

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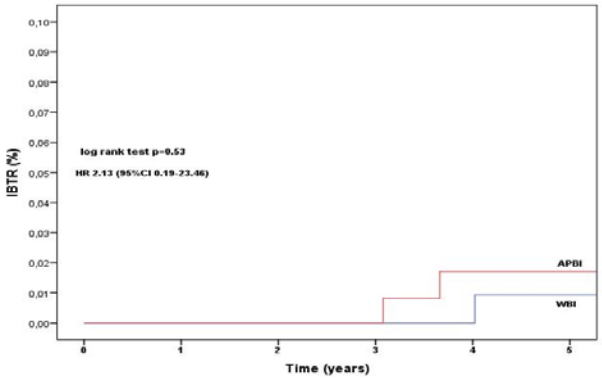
Purpose or Objective: Breast cancer (BC) could be classified into four major molecular subtypes: Luminal-A, Luminal-B, triple negative/basal-like, human epidermal growth factor 2 (HER2) enriched. This classification could be based on immunohistochemistry, and may allow the clinicians to optimize treatment management. Luminal-A tumors represent around 40% of BC and are characterized by: estrogen receptor (ER) and/or progesterone receptor (PgR) positive, HER2/neu negative, and low Ki-67 proliferative index. Early luminal-A tumors tend to have an excellent prognosis, with high survival and low recurrence rates. The aim of this analysis was to observe Luminal-A outcome from a phase 3 trial comparing whole-breast irradiation (WBI) to accelerated partial breast irradiation (APBI) using intensity-modulated radiotherapy (IMRT) technique.

Material and Methods: In the whole trial 520 patients were randomized in 1:1 ratio to receive APBI versus WBI after breast conserving surgery for early BC. The primary endpoint was occurrence of ipsilateral breast tumor recurrence (IBTR); the main analysis was by intention-to-treat. This trial was registered with ClinicalTrials.gov, number NCT02104895.

Results: Luminal-A patients represented the 61.5% of the whole series (151 WBI versus 169 APBI). 5-year event rate according to allocated group showed no statistical difference in terms of IBTR (p=0.53). One case (0.9%) versus two cases (1.7%) were observed in the WBI and APBI arms, respectively. Survival events occurrences and IBTR curve are summarized in the Figures.

		WBI (n=151)		APBI (n=169)		
Event	**Total**	**n**	**%**	**n**	**%**	**p-value***
IBTR	3	1	0.9	2	1.7	0.53
Local relapse	1	1	0.9	0	0	0.33
New ipsilateral BC	2	0	0	2	1.7	0.14
Locoregional relapse	4	2	1.7	2	1.7	0.95
Distant metastases	1	1	0.8	0	0	0.33

*p-value from log rank test



Conclusion: We observed a very low 5-year rate of IBTR for Luminal-A patients treated with APBI. Although these results should be confirmed at a longer follow up time, this approach should be considered for this subset of early BC patients.

PV-0513

The impact of chemotherapy on toxicity in the era of hypofractionated radiotherapy

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Purpose or Objective: To evaluate toxicity in breast cancer patients treated with anthracycline and taxane based chemotherapy and whole breast hypofractionated radiotherapy, and to identify the risk factors for toxicity.

Material and Methods: From April 2009 to December 2014, 540 patients received radiotherapy after breast conservative surgery (BCS). The dose was 42.4 Gy in 16 daily fractions, 2.65 Gy per fraction. The boost to the tumor bed was administered only in grade 3 patients and in patients with close or positive margins. Acute and late toxicity were prospectively assessed during and after radiotherapy according to RTOG scale. The impact of patients clinical characteristics and dose inhomogeneities on the occurrence of an higher level of toxicity has been also evaluated by univariate and multivariate analysis.

Results: One hundred and nineteen patients received chemotherapy. Sixty-one patients (11.3%) underwent trastuzumab therapy and four hundred and forty-one (81.6%) hormonotherapy. The mean age was 74 (range 46-91 yrs). Forty seven (8.7%) and two hundred fifty eight (47.5%) patients were affected by diabetes mellitus and hypertension, respectively. G1 and G2/G3 acute skin toxicity were 53.7% and 28.5% in patients received chemotherapy and 63.2% and 18.5% in patients who did not receive it, respectively. No significant difference (p=0.092) was find