planned hospitalization. Full course of radiotherapy can be safely used in older patients but they have a low tolerance to chemotherapy and frequently require dose-reduction; the effect of this chemotherapy is uncertain.

**EP-1277**
**Effect of age on rectal toxicity following radical radiotherapy to prostate cancer**
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**Purpose/Objective:** Various guidelines, including UK NICE guidance recommend a minimum of 74 Gy for prostate cancer radiotherapy. So we escalated prostate radiation dose to 74 Gy (2Gy per #) in our department. We previously found that elderly patients were able to tolerate radiotherapy (RT) very well when median RT dose was 70 Gy (Data published 2006). Following RT dose escalation, we analysed our prospectively collected, rectal toxicity data in our department.

**Materials and Methods:** All patients (pts) treated with prostate radiotherapy between August 2010 and July 2011, were identified from MOSAIC Software (Elekta). Pts who had prostate-bed radiotherapy, whole pelvis RT or HDR boost were excluded. The regional ethics committee advised that formal ethics approval was not necessary.

**Results:** 132 patients were identified; median age was 70.5 years, (range 53 to 81 yrs). Median PSA was 13 (range 4.2 to 133). Gleason scores: G6 4.5%, G7 51.5%, G8 21.2%, G9 18.2% G10 2.3% (missing data 2.3%). Tumour stage: T1 8.3%, T2 55.3%, T3 32.6%, T4 0% (missing data 3.8%). Median total radiation dose was 74Gy (range 66Gy to 78Gy). (66 Gy is an outlier due to dosimetric problems caused by bilateral hip replacement). Age was significantly associated with rectal toxicity. Patients aged over 75 were almost 3.5 times more likely to develop ≥ grade 2 toxicity (p=0.026). Absolute total rectal volume outlined (in cc) was also significantly associated with rectal toxicity. Pts having maximum rectal volume of more than 46cc were 3.8 times more likely to develop ≥ grade 2 toxicity (p=0.038 chi squared test). The rectal DVH parameters for 30Gy, 50Gy, and 60Gy were significantly associated with rectal toxicity (p=0.038; p=0.016 and p=0.002 respectively). The absolute-volume parameters were consistently and better correlated with rectal toxicity than percentage-volume parameters. Median absolute rectal volume for patients with ≥ grade 2 acute rectal toxicity was significantly higher than for those with grade 0/1 toxicity (p=0.018). By contrast, the difference between median percentage-Volume was not significant (p=0.345). The following Absolute-volume DVH constraints were most significantly correlated with rectal toxicity. V30≤42cc, V50≤40cc, V60≤35cc.

**Conclusions:** Our real world data, from an unselected population of pts indicate elderly pts (≥ 75 years) are at increased risk of rectal toxicity. If rectal DVH parameters are not optimal, elderly prostate pts should be considered for radiation dose reduction as patient preference studies indicate that lot of patients prefer lower toxicity over efficacy. (van Tol-Geerdink et al. J Clin Oncol. 2006: 24: 4581).

**EP-1278**
**Radiotherapy treatment for the very elderly: a retrospective analysis 2012-2013**
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**Purpose/Objective:** The incidence of cancer in the elderly is expected to rise. For example in the USA it is estimated that it will rise by 67% between 2010 to 2030. This is a retrospective analysis audit on radiotherapy to the very elderly defined as patients above 80 years old from Jan 2012 until Dec 2013. We hope to analyse the radiotherapy intent; tumour site analysis and median survival days from the last fraction of radiotherapy. With these understanding, we hope to be able to further better or understanding and plan management for our very elderly who are under our care in future.

**Materials and Methods:** We retrospectively collected and analysed the data from our Aria database for all patients above 80 years old on the day they finished treatment from January 2012 until Dec 2013.

**Results:** We treated 1571 patients who were very elderly during these analysed 2 years. 40% of our very elderly were treated with radical intent. Nearly 25% of them were patients treated for Breast Cancer followed by Lung Cancer (20%). There was nearly an equal distribution with 51% of them being male patients. The median days from time of last fraction of radiotherapy to death was 129 days with a maximum of 826 days at time of analysis. Palliative treatments to the very elderly were mainly palliation for bone metastases and lung/ chest palliation.

**Conclusions:** There is a high proportion of the very elderly treated with radical intent with radiotherapy; with Breast and Lung Cancer being the highest malignant cause. There was a fairly equal sex distribution between those treated for radiotherapy in the very elderly. We need to further analyse these data to provide a more meaning insight in order to improve and adequately support our very elderly requiring treatment.

**EP-1279**
**Outcome of preoperative chemoradiation followed by esophagectomy in patients of older age or with an extended tumors**
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**Purpose/Objective:** The incidence of esophageal cancer is increasing. Additionally, an increasing number of patients are older than 75 years. Since the publication of the CROSS trial in 2012, preoperative chemoradiation (CRT) followed by