Results: From September 2011 to December 2013, 80 patients were enrolled and two patients withdrew consent, finally 78 patients included for analysis. There were 73 male and 5 female. There were 96.2% of them had 0-1 WHO ECOG. For the primary site, 23(29.5%) patients were oral cavity, 26 (33.3%) patients were oropharynx, 24(30.8%) patients were hypopharynx, and 5 (6.4%) patients were larynx. Treatment compliance was well. There were 92.3% patients completed planned schedule. After the induction chemotherapy, the overall response rate were 92.3%, which included 37.2% complete response and 55.1% partial response, respectively. Only 2(2.6%) patients had stable disease and 1(1.3%) patient had progression disease. The response rate of oral cavity, oropharynx, hypopharynx, and larynx were 82.6%, 92.3%, 100%, and 100% respectively. There were 47.4% grade 3 or 4 neutropenia and 20.5% grade 3 anemia. Only 6 severe adverse event were report, including 4 febrile neutropenia with sepsis, one oesteomyelitis, and one massive bleeding.

Conclusion: This outpatient docetaxel-based neoadjuvant chemotherapy regimen is a effective regimen in locally advanced squamous cell carcinoma of head and neck.

EP-1107
Impact of waiting time for treatment initiation on giotic T1N0M0 squamous cell carcinoma RT results
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Purpose or Objective: The goal of this study is to evaluate the results of treatment of T1N0M0 giotic cancer with irradiation, with emphasis on the influence of time from diagnosis to the beginning of radiation therapy.

Material and Methods: We performed the retrospective analysis of the group of 539 patients with T1N0M0 giotic cancer, treated with radiation therapy in the Center of Oncology in Cracow between years 1977 and 2004. In 481 cases (89%) the tumor was limited to single vocal cord and in the remaining 58 involved both of them. Anterior commissure involvement was observed in 173 (32%) of the patients. According to the radiotherapy technique and fractionation schedule, we have divided patients into three separate groups: I - two opposed fields, TD 60 Gy/24 - 277 patients (51%); II - two opposite fields, TD 60 Gy/30 - 160 (31%); III - one lateral photon-electron beam, TD 60 Gy/30 - 102 (19%). The average time from laryngeal biopsy to the beginning of radiotherapy was 56 days (range: 3 - 145 days). The overall survival (OS) and disease- free survival (DFS) were calculated using the Kaplan - Meier method. Log - rank test was used to calculate differences between each groups, and the independent prognostic factors were selected by the Cox multiparameter analysis.

Results: The 5-year OS and 10-year OS were 84% and 69%, 5- and 10-year DFS were 90% and 88%, and the 5- and 10-year LC rates were 89% and 87%, respectively. One- dimensional analysis revealed following prognostic factors for LC and DFS: tobacco smoking, radiotherapy technique, and the anterior commissure involvement. The 5- and 10-year LC rates in the group of patients smoking less than 20 cigarettes a day were 90% and 87%, compared to 76% and 70%, respectively, in the group smoking more than 20 cigarettes a day (p=0.01). Considering the RT technique, the lowest 5- and 10-year LC rates were observed in the group treated with the oblique beams (80% and 78%, respectively), and the highest when the oblique fields were used - 91% and 88%, respectively (p=0.002). The tumor involvement of the anterior commissure decreased 5-year LC by 15% (92 to 77%), and 10- year LC rate by 19% (89 to 70%, respectively, p=0.006). The waiting time for the beginning of RT longer than 30 days from the biopsy was statistically significant poor prognostic factor for DFS and LC. 5- and 10- year LC rates in the group of patients who started RT during the period of 30 days from the biopsy were 92% and 90%, respectively, and in the group which started treatment after that time, these LC rates were 84% and 82%, respectively (p=0.01). Tumor interior commissure involvement was proven to be an independent prognostic factor affecting DFS and LC.

Conclusion: 1. Radiation therapy is efficient method of treatment the T1N0M0 giotic cancer
2. Prolonged time of waiting for the beginning of RT decreases the LC and DFS rates
3. The tumor involvement of anterior laryngeal commissure proved to be an independent adverse prognostic factor for LC and DFS

EP-1108
Chemoimmunotherapy with hyperfractionated radiotherapy in head and neck carcinoma.
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Purpose or Objective: The aim of the present study is to analyze clinical outcomes and toxicity in patients with locoregionally advanced head and neck carcinoma treated with concurrent hyperfractionated radiotherapy with Cetuximab and Carboplatin.

Material and Methods: Forty-one patients (8 cases ST.III and 33 cases ST.IV) were prospectively included in this study from September 2009 to November 2014. Radiotherapy consisted in hyperfractionated radiotherapy: 1.15-1.20 Gy/fraction, BID, 5 days/week during 7 weeks. The average dose administered was 80.2 Gy (79.2-80.5). Carboplatin was administered 5 mg/m² before each fraction of radiotherapy. Cetuximab was administered 400 mg/m² one week before hyperfractionated radiotherapy and then 250 mg/m² weekly while radiotherapy. Seven patients were not evaluable for response (in 3 patients, Capecitabine was added to the treatment; in 1 patient nodal metastases came from a papillary thyroid carcinoma; 3 patients were not evaluable for response because 2 patients died within 30 days after treatment and 1 patient has not enough follow-up to be evaluated for response).

Results: All but 2 of the 34 evaluable patients showed objective response (19 complete responses). The local relapse-free survival, cause specific survival, and overall survival was 58.7%, 57%, 49% at 5 years, respectively. Severe (Grad3/4) acnesiform rash resulted predictive of Clinical Response (p<0.005), Local relapse (p=0.008), distant metastases (p=0.012) and tumour related death free survival (p=0.0001). Severe (Grade III) acute cutaneous and mucosal toxicity was present in almost 60% of the cases.

Conclusion: This protocol induces a high rate of clinical responses and excellent survival figures in patients developing an strong immune response after combined radiochemoimmunotherapy.
Purpose or Objective: The current standard of care for newly diagnosed papillary thyroid carcinoma invading the trachea is surgical resection followed by radioactive iodine therapy (RAI) and thyroid stimulating hormone suppression. However, the local recurrence rate is high. Several studies reported adjuvant external beam radiotherapy (EBRT) reduced the local recurrence. The benefit of adjuvant EBRT remains controversial. We evaluated the effect of adjuvant EBRT on local control in a single institution database.

Material and Methods: Between May 2003 and October 2013, 36 patients with locally advanced papillary thyroid carcinoma invading the trachea (pathologic stage T4) were treated with surgical resection. After surgery, 16 patients received adjuvant EBRT using intensity modulated radiation therapy followed by RAI, and 20 patients were treated with RAI alone. The age range was 36-87 years (median 64 years). EBRT doses ranged from 30-66 Gy (median 60 Gy). There was no statistically significant difference in terms of clinical characteristics between the EBRT and no EBRT groups.

Results: Median follow up was 26.6 months (range, 16.5-40.1) in EBRT group, and 43.9 months (range, 13.9-117.6) in no EBRT group. There was no local or distant failure in EBRT group during the follow up. There were five local failures and one distant failure in no EBRT group. The two-year & five-year local failure free survival rates were 95.0% and 49.8% in EBRT group. There was no acute grade 2 esophagitis (n=1) and one grade 2 skin reaction (n=3). There were no grade 2 late complications in EBRT group.

Conclusion: Adjuvant EBRT was found to be an effective treatment for local control in papillary thyroid carcinoma invading the trachea with tolerable complications, in a study at a single institution. Longer follow up will be required to demonstrate outcomes for tumor control and complications.

Purpose or Objective: Locally advanced, high-risk cutaneous squamous cell carcinoma (CSCC) of the head and neck are typically aggressive and treated with combined modality therapy. These patients tend to be older, frail with multiple comorbidities which makes chemotherapy difficult to tolerate. Cetuximab is a monoclonal antibody against the EGFR receptor and has demonstrated activity in CSCC. We investigate the safety and efficacy of combined therapy in advanced, high risk CSCC with the addition of cetuximab.

Material and Methods: Patients were identified with locally advanced CSCC with high risk or very high risk features who were treated with cetuximab and radiotherapy between 2006 and 2013. A matched cohort over the same time period was identified who were treated with radiation. Propensity score analysis was performed with weighted factors including: Charlson Comorbidity Index score (age-adjusted), age, KPS, primary location, T and N stage, recurrent status, margin status, LVSi, PNI and grade. Overall survival, progression free survival and freedom from local or distant recurrence were evaluated with the Kaplan-Meier method for both the unadjusted and propensity score adjusted groups. Multivariate analysis was performed using cox proportional hazard models.

Results: 29 patients were in the cetuximab and 39 in the control group. Median follow-up for alive patients was 30 months. Patients in the cetuximab group were more likely to have advanced N stage, positive margins and recurrent disease. After propensity score matching the groups were well balanced. OS was not statistically significant between the two groups but depicted in Table 1 below there were approximately 20% more long term survivors in the cetuximab group after matching. Local control was 76% and 79% in the cetuximab and control groups, respectively. The rate of distant metastases was lower in the cetuximab group 6.8% versus 10%. The incidence of grade 2-3 toxicity was 41% in the cetuximab group. There was one grade 3 cetuximab acniform rash, one grade 4 dysphagia and no grade 5 toxicity.

Table 1 Overall Survival Probabilities by year in both unadjusted and Propensity Score Adjusted Cohorts

<table>
<thead>
<tr>
<th>Propensity Score Adjusted</th>
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<tbody>
<tr>
<td>Cetuximab</td>
<td>90%</td>
<td>74%</td>
<td>74%</td>
<td>79%</td>
<td>74%</td>
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<td>63%</td>
<td>75%</td>
<td>69%</td>
<td>62%</td>
</tr>
<tr>
<td>No Cetuximab</td>
<td>83%</td>
<td>63%</td>
<td>75%</td>
<td>69%</td>
<td>62%</td>
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</table>

Conclusion: Although limited by small numbers, we found that there were more long-term survivors and less distant metastasis in the cetuximab group. This is the largest report of CSCC patients treated with cetuximab. In the absence of prospective data, we believe this data reveals that the addition of cetuximab is well tolerated and reveals signs of efficacy in this typically poor performing group of patients and should be pursued in clinical trials.

Electronic Poster: Clinical track: CNS

EP-1111
A cut point for Ki-67 proliferation that predicts for poorer survival in high-grade glioma

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Purpose or Objective: Ki-67 index is used to assess cell proliferation during histopathological assessment of various tumours including high grade gliomas (HGG): Anaplastic astrocytoma, Anaplastic Oligodendroglioma and Glioblastoma Multiforme (GBM). We aimed to determine if there is a correlation between percentage staining of Ki-67 and overall survival in patients with HGG and determine a cut-point for percentage staining of Ki-67 that predicts for poorer survival.

Material and Methods: Records of adult patients diagnosed with HGG on histopathological specimens examined at the Institute of Clinical Pathology and Medical Research at Westmead Hospital, NSW, between 1st of January 2002 and 30th of July 2012 were identified. The specimens of these patients were examined for quantification of Ki-67 staining by two independent pathologists. Patient, disease, treatment and survival data were collected from hospital and cancer care service records. Descriptive statistical analyses were performed on the patient, disease and treatment data. Survival curves were constructed using Kaplan Meir methods. Using the minimum p value approach we obtained a cut-point for Ki-67 percentage staining that predicts for poorer survival.

Results: Of the eligible 78 patients (median age = 57, range 18 - 87) 46 (59 %) were males and 32 (41%) were females. 59 (76%) patients were of ECOG performance status 0 -1. Seven patients had anaplastic astrocytoma or anaplastic glioblastoma