

in 30 fractions over 6 weeks using the simultaneous integrated boost technique. Those with persistent or recurrent disease had imaging studies and clinical evaluation performed to determine the extent and sites of treatment failure. These were reconstructed on the planning CT images and analysed using the dose distribution of the IMRT plan. **Results:** 52 patients were included in the study. The median follow-up was 32.2 months. There were 7 isolated local failures, no regional recurrences and 1 with distant disease. None of the patients required post-treatment neck dissection. All local failures were in-field and occurred within the high-dose PTV. There were no marginal recurrences. There were no recurrences in the retropharyngeal or retrostyloid nodes, in the vicinity of the spared parotid gland or outside the treatment fields. Actuarial recurrence-free, disease-specific and overall survival rates at 5 years were 83.9%, 85.9% and 75.7% respectively.

**Conclusions:** The absence of marginal recurrences in our study validated our approach to IMRT target volume definition post-IC in locoregional advanced oropharyngeal SCC. We also observed no regional failure and a low incidence of distant relapse, suggesting that IC may provide additional benefit in improving nodal control and eradicating micrometastases.

PO-0733

PHASE II STUDY OF SORAFENIB IN ADVANCED SALIVARY ADENOID CYSTIC CARCINOMA: INITIAL OUTCOME AND TOXICITY

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**Purpose/Objective:** Adenoid cystic carcinoma (ACC) accounts for 2-3% of head and neck malignancies. Primary treatment is usually surgical excision and postoperative radiotherapy. Despite this combined approach there is a propensity for local recurrence. Moreover, systemic spread is common and seen in about 40% of cases. The disease is often characterised by slow progression with a median time to diagnosis of metastases of 4 years and a 3 year post metastatic survival of 35% without intervention.<sup>1</sup> The role of systemic chemotherapy in ACC is limited such that experimental use of molecular targeted therapy is attractive. However, results using a number of targeted agents have been disappointing with few documented objective responses. We report initial outcome and toxicity data from the first phase II trial of sorafenib, an oral multi-kinase inhibitor targeting both tumour cells and tumour vasculature, in ACC.

**Materials and Methods:** Patients of performance status 0 or 1 with histologically confirmed locally advanced or metastatic ACC were included. They received sorafenib at a daily dose of 800mg until disease progression or significant toxicity. Follow-up was until discontinuation of treatment due to disease progression, unacceptable drug toxicity or patient choice. Response was assessed by conventional morphological imaging (CT/MRI) and measured using RECIST criteria. Toxicity was reported using International Common Toxicity Criteria (version 3).

**Results:** Twenty-three patients, median age 51 yrs (range, 36-73) were recruited. Four patients had locally advanced disease only (3/4 with intracranial extension), 4/23 locally advanced and metastatic disease and 15/23 metastatic disease alone. One (4%) patient demonstrated a partial response to treatment. Two (9%) patients had reduction in primary disease with stable distant disease. 3/23 patients remain on treatment with stable disease at 9-13 months' follow-up and 4/20 who have now discontinued treatment had stable disease at 12 months. One (4%) patient withdrew, 2 (9%) stopped treatment due to deterioration in performance status, 1 (4%) discontinued due to a possible adverse drug reaction (cutaneous ulceration) and there were 2 (9%) early deaths, thought unrelated to the study drug. Grade 3 toxicities were seen in 39% of patients, including diarrhoea (2/23), fatigue (3/23), hand-foot skin reaction (4/23), neutropenia (1/23), rash (1/23) and deranged liver function (2/23). One patient experienced grade 4 toxicity (deranged liver function, due to a blocked biliary stent). 15/23 patients required a dose reduction. **Conclusions:** Complete results are awaited but preliminary assessment suggests limited activity of sorafenib in ACC. A response was seen in 13% of patients and 24% had stable disease at 1 year. Significant toxicity was seen at a daily dose of 800mg but was acceptable at 600mg.

**References**

1. Eby LS, Johnson DS, Baker HW. Adenoid Cystic Carcinoma of the head and neck. *Cancer* 1972; **29**:1160-1168

PO-0734

HIGH INCIDENCE OF UNDETECTED SECONDARY MALIGNANCIES IN PATIENTS WITH CURATIVELY TREATED TUMORS OF THE HEAD AND NECK

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**Purpose/Objective:** H&N malignancies represent the sixth most common type of tumor where the main risk factors are tobacco consumption and alcohol abuse. These toxicants also raise the risk for the development of secondary malignancies in the gastro-intestinal tract, the lung, and other H&N areas. Thus, in the past there have been many efforts deployed to develop effective programs with screening examination for high-risk patients. Interestingly, no higher rates of treatments in curative intent or a proposal for a directive including helpful additional aftercare examinations could be established, until now.

The aim of the present study was to prospectively test the value of screening patients at high risk because of a prior curatively treated tumor of the H&N for secondary malignancy of the gastro-intestinal tract, the lung or another anatomical region of the H&N. **Materials and Methods:** The including criteria for the patients to enter the study was specified as a prior resected and curatively treated squamous cell carcinoma of the H&N without distant metastases. For suitable patients additional examinations including an endoscopy of the esophagus and stomach, an ear-nose-throat endoscopy of the H&N and a computer tomography (CT) of the chest were conducted.

**Results:** 118 patients were recruited (13 women and 105 men, median age 62 (38 to 86 years)). Overall, 118 CT scans, 112 H&N endoscopies and 99 endoscopies of the esophagus and stomach were performed. 59 of all patients (50%) showed normal results in all examinations and entered into the regular follow-up. 30 patients were directly classified as highly suspicious for a secondary malignancy. For 29 other patients a short-term reexamination was recommended, at which 3 of these also showed a remaining conspicuity.

Thus, in total 33 findings of all performed examinations (28%) had to be clarified by additional bronchoscopies, video assisted thorascopies, MRI- and PET-CT scans as well as complete tumor excisions.

By this procedure, 26 new malignancies were confirmed within 21 patients (10 lung, 3 gastrointestinal, 7 H&N, 1 renal tumor(s)). In the further course, 18 of these 21 patients (86%) could again be treated in curative intent. The other three patients received a palliative radio- or chemotherapy because of an osseous metastasis or multiple metastases in both lungs.

**Conclusions:** The results of the screening examinations revealed a strong suspicion of a previously undetected secondary malignancy in more than 28% of tested patients. Furthermore, 86% of all histological confirmed tumors could be again treated in curative intent. Accordingly, expanded patient surveillance appeared reasonable, and can be recommended especially for high-risk patients. The possible impact on tumor specific lethality and the individual prognosis of every single patient remains to be seen and requires larger randomized studies with longer follow-up periods.

PO-0735

ASPIRATION AND SURVIVAL IN LOCALLY ADVANCED OROPHARYNGEAL CANCER TREATED WITH CHEMORADIATION

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