Purpose or Objective: The aim of this prospective observational study was to: (1) linguistically validate the Italian translation of the Vanderbilt Head and Neck Symptom Survey (VHNSS), a patient-reported outcome measure to screen for symptoms in the head and neck cancer (HNC) patients (pts) population; (2) perform a pilot test on the translated survey (VHNSS-IT) to assess the feasibility and utility, both for clinicians (cls) and for pts, of its administration in clinic as a symptoms’ screening procedure.

Material and Methods: A multi-step linguistic process was conducted to generate and validate the VHNSS-IT: a forward translation, a backward translation and a patient testing (n = 35). For the pilot test 6 cls and 38 pts were recruited. Each pts completed the survey before the scheduled visit with the cls. Time to completion (TC), caregiver help (CH) and VHNSS-IT scores distribution reflecting symptom’s intensity (SI) were recorded. The visit of the first three pts of each cls was performed per standard of care and the cls had to review the questionnaire during the visit, reporting the global perceived utility (GU).

Results: Two intermediate Italian versions were created during the process: the first Italian version derived from a reconciliation of three forward translations and the second Italian version derived from changes in the first version after the backward translation step. During the patient testing step only 2 pts reported problems with items comprehension and the rate of comprehension problems per single item was lower than expected: 2.9% in 16 items and 5.7% in 1 item. Pts could give suggestion in order to make items clearer and easier to understand: 43% of pts proposed a revision of the survey and most of these suggestions were retained. For the pilot test median TR was 2’15”. Time burden was perceived to be acceptable for all cls; they all also found the questionnaire easy to use. The rate of GU was 100%. Reviewing the survey, 4 of 6 cls identified symptoms unaddressed during the visit (swallowing problems, xerostomia, mucus, pain, speech and hearing problems). 30% of pts requested CH: these pts were significantly older (p < 0.001). Median TC was 6’57”. TC was related to age (p = 0.02), knowledge level (p = 0.02) and employment status (p = 0.001). Time after the start of the radiotherapy course (< 6 months vs > 6 months) and surgery (yes versus no) were considered as variables that could possibly influence average SI scores per subscale. Figure 1 shows relevant findings.

Conclusion: The VHNSS-IT represents a suitable instrument to screen for symptoms in Italian HNC pts treated with surgery and radio-chemotherapy and it can help cls to identify symptoms that require referral, education or intervention.

EP-1088
Is time from symptom to treatment a prognostic factor in stage III-IV head and neck cancer patients?
C. Furlan1, J. Polesel2, C. Gobitti1, E. Minatel1, E. Vaccher3, L. Barzan4, G. Grando5, G. Franchin1
1Centro di Riferimento Oncologico, Radiation Oncology, Aviano, Italy
2Centro di Riferimento Oncologico, Epidemiology and Biostatistics, Aviano, Italy
3Centro di Riferimento Oncologico, Medical Oncology, Aviano, Italy
4Centro di Riferimento Oncologico, Oncologic Surgery, Aviano, Italy
5Azienda Ospedaliera Santa Maria degli Angeli, Otorhinolaryngology, Pordenone, Italy

Purpose or Objective: The impact of time from symptoms to treatment on survival of head and neck squamous cell carcinoma (HNSCC) patients has been investigated with conflicting results. This might be explained by the heterogeneity of studies with respect to stage and treatment modality. To reduce bias, this study focused on patients diagnosed with stage III-IV HNSCC managed with definitive chemo-radiotherapy to assess the effect of total interval and treatment delay on survival.

Material and Methods: A single-centre retrospective cohort analysis on 185 patients with stage III-IV HNSCC of oropharynx (n = 124), larynx (n = 36), and hypopharynx (n = 25) managed with definitive chemo-radiotherapy between 2008-2014 was performed. Patients characteristics included sex, age, smoke, Adult Comorbidity Evaluation (ACE-27), stage, tumor site, and HPV status (table 1). Treatment modalities included concomitant chemoradiation (CCRT, n = 33) for stage III patients, and induction chemotherapy followed by radiotherapy (IC-CRT, n = 152) for stage IV patients. Total interval (time from first symptoms to the start of treatment) and treatment interval (interval between the date of the pathology report and the start of treatment) were defined in accord with the Aarhus Statement Guidelines. We chose
B. Meduri, chemotherapy in oropharyngeal cancer
Accelerated hypofractionated IMRT-IGRT and concurrent EP-1089 with a reduced risk of dying (hazard ratio 0.37, 95% CI 0.13 – 0.51) in multivariable analysis a longer total interval was associated with OS according to treatment interval were of 98 days and 29 days, respectively.

Conclusion: Longer treatment interval resulted associated with the use of chemotherapy. No difference in OS according to treatment interval was noted.

Results: At a median follow up of 37 months, the 3-year OS for the entire cohort was 63%. Median total interval and treatment interval were of 98 days and 29 days, respectively. Patients with longer total interval were more likely to be patients with a low comorbidity grade (ACE-27 grade 0-1). On multivariable analysis a longer total interval was associated with a reduced risk of dying (hazard ratio 0.37, 95% CI 0.13 – 1.01; p = 0.05). No association of longer treatment interval with OS was noted on univariable and multivariable analysis. The median total interval and median treatment interval as cutoff points to divide patients. Univariable and multivariable Cox proportional hazard model was used to evaluate overall survival (OS).

Results: With median follow-up of 38 months (range 14-70) the estimated 3-years local-DFS rate, MFS, DFS and OS were 88%, 0.045E, 91%, 0.045E, and 83%, respectively. The complete response rate was 88%. All the patients completed the radiotherapy; the median treatment duration was 43 days, six patients have temporarily discontinued treatment (median: 5 days) because of toxicity. No grade 4 acute toxicity was observed, maximal acute toxicities were G3: mucosa 31%, skin 15%, dysphagia 24%, leukopenia 5%. Maximal late toxicities were: xerostomia G2 36%, mucosa G2 23%, skin G2 12%, laryngeal G2 17%, dysphagia G2 14%, osteoradionecrosis 3%, trismus 9%.

Conclusion: This analysis shows that a moderately accelerated hypofractionated IMRT-SIB in tomotherapy and concurrent chemotherapy achieved high tumor local control and acceptable toxicity compared with previous chemoradiotherapy treatment with standard fractionation. Based on these results we elaborate a randomized clinical trial with a more hypofractionated regimen in order to obtain a better local control without increasing toxicity.

**Material and Methods**: Between July 2009 and February 2014, 59 consecutive patients with LAOC received accelerated hypofractionated radiotherapy with tomotherapy and concurrent chemotherapy. The disease was stage III in 8% and stage IVa in 92% of patients. Prescribed doses to primary tumor and involved nodes was 66 Gy at 2.2 Gy/fraction, high risk and low risk nodes received simultaneously 60 Gy and 54 Gy at 2.0 Gy and 1.8 Gy/fraction, over 6 weeks. Acute toxicity was scored according to RTOG and late toxicity according to CTCAE-4 criteria. The disease free survival (DFS), local disease free survival (local-DFS), metastasis free survival (MFS) and overall survival were calculated using the Kaplan-Meier method.

Results: In HNSCC patients with stage III-IV at diagnosis, a reduction of total interval and of treatment delay does not ameliorate survival. Development of fast track referral strategies should be aimed at increasing the ratio of stage I-II patients.

**Purpose or Objective**: Overall treatment time is not a prognostic factor in chemoradiation for nasopharyngeal carcinoma.

**Material and Methods**: We reviewed 109 patients charts with NPC. Pathological, clinical and dosimetric data were retrieved. All patients received concomitant chemoradiation (CCRT) with IMRT-SIB with 69.96Gy to GTVs, 59.4 and 54Gy to N0; 17% N1; 39% N2; 27% N3. With a median follow up of 22 months, 2-year local control was 95.9%, freedom from metastases was 88% and overall survival was 79.8%.

**Purpose or Objective**: Accelerated hypofractionated IMRT-IGRT and concurrent chemotherapy in oropharyngeal cancer

**Material and Methods**: From 109 patients, median age was 53; 74% male; 71% were WHO grade III: 43% T1; 14% T2; 18% T3, 25% T4; 17% N0; 17% N1; 39% N2; 27% N3. With a median follow up of 22 months, 2-year local control was 95.9%, freedom from metastases was 88% and overall survival was 79.8%.