**ANNEX**

***Table 1:*** *Patient clinical characteristics*

|  |  |
| --- | --- |
| ***Characteristics*** | ***Patients******(n=100)*** |
| ***Stage***IIIIIIIVAIVBIVC  | *5**7**14**61**7**6* |
| ***Tumor Localization***Oral CavityOropharynxHypopharynxNasopharynxLarynxPara-nasal sinuses | *18**20**12**11**37**2* |
| ***Histopathology***Squamous cell carcinomaLymphoepitheliomaAdenoid cystic carcinomaUndifferentiated carcinoma | *87**10**1**2* |

***Table 2:*** 18F-FDG-PET/CT vs CT: staging reclassification in TNM staging (A), tumour extension-cT (B) and nodal disease affectation-cN (C) comparing18F-FDG-PET/CT and CT. (Tx: primary tumor cannot be assessed)

|  |  |
| --- | --- |
| 2.A) cT changes | **18F-FDG-PET/CT** |
| T1 | T2 | T3 | T4 | Tx |  Total | Reclassified=28 |
| CT | T1 | 8 | 0 | 1 | 0 | 0 | 9 | 1 (12.5%) |
| T2 | 2 | 16 | 5 | 2 | 0 | 25 | 9 (36%) |
| T3 | 1 | 4 | 13 | 6 | 0 | 24 | 11(45.8%) |
| T4 | 0 | 2 | 3 | 34 | 0 | 39 | 5 (12.8%) |
| Tx | 0 | 0 | 0 | 2 | 1 | 3 | 2 (66.7%) |

|  |  |
| --- | --- |
| 2.B) cN changes | **18F-FDG-PET/CT** |
| N0 | N1 | N2A | N2B | N2C | Total | Reclassified=47 |
| CT | N0 | 16 | 6 | 6 | 5 | 2 | 35 | 19 (54.3%) |
| N1 | 2 | 4 | 1 | 3 | 0 | 10 | 6 (60%) |
| N2A | 0 | 0 | 10 | 5 | 1 | 16 | 6 (37.5%) |
| N2B | 0 | 1 | 5 | 16 | 2 | 24 | 8 (33%) |
| N2C | 0 | 0 | 1 | 7 | 7 | 15 | 8 (53.3%) |

|  |  |
| --- | --- |
| 2.C) cTNM changes | **18F-FDG-PET/CT** |
| I | II | III | IVA | IVB | IVC | Total | Reclassified=27 |
| CT | I | 2 | 0 | 0 | 1 | 0 | 0 | 3 | 1(10%) |
| II | 2 | 4 | 2 | 2 | 0 | 0 | 10 | 6 (60%) |
| III | 0 | 3 | 12 | 7 | 1 | 1 | 24 | 12 (50%) |
| IVA | 0 | 0 | 0 | 48 | 1 | 2 | 51 | 3 (5.9%) |
| IVB | 0 | 0 | 0 | 1 | 5 | 2 | 8 | 3 (37.5%) |
| IVC | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 (0%) |
| Tx | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 2 (100%) |

***Table 3:*** *Synchronous tumors detected by 18F-FDG-PET/CT and therapeutic management*

|  |  |  |
| --- | --- | --- |
| **Case** | **Synchronous tumours/ Staging [AJCC]** | **Therapeutic management** |
| **1** | Squamous larynx carcinoma (cT2N0M0, II)Squamous oropharynx carcinoma (cT2N0M0, II) | Chemoradiotherapy in both locations |
| **2** | Squamous larynx carcinoma (cT3N0M0, III)Non-small cell lung cancer (cT1N0M0, IA) | Chemoradiotherapy in HNC + Lung surgery |
| **3** | Squamous larynx carcinoma (cT4N3M0, IVB)Non-small cell lung cancer (cT2N1M0, IIA) | Palliative chemotherapy in both locations |
| **4** | Squamous larynx carcinoma (cT2N2M0, IVA)Esophagus carcinoma (cT4N0M0, IIIA) | Chemoradiotherapy in both locations |
| **5** | Squamous hypopharynx carcinoma (cT3N2M0, IVA)Esophagus carcinoma (cT1N0M0, IA) | Chemoradiotherapy in both locations |
| **6** | Squamous oropharynx carcinoma (cT4aN0M0, IVA)Low risk prostate cancer of NCCN | Chemoradiotherapy in HNC + prostate follow-up |
| **7** | Squamous hypopharynx carcinoma (cT2N0M0, II)In situ carcinoma of colon (cTisN0M0, 0) | Chemoradiotherapy in HNC+ colon surgery |
| **8** | Squamous larynx carcinoma (cT1N0M0, I)Hepatocarcinoma grade A  | Radical radiotherapy in HNC + Liver radiofrecuency |