**Supplementary Table 1:** Demographic Parameters of Present Study Cohort

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Patients n=250 (%)** | **Controls**  **n=250 (%)** | **Tumor tissues**  **200** |
| **Age (years)** | | | |
| Median (range) | 45(7-68) | 45±5(25-65) | 40(10-70)  >40(140%)  ≤40(60%) |
| Gender |  |  |  |
| Male | 130(52%) | 90(36%) | 102(51%) |
| Female | 120(48%) | 160(64%) | 98(49%) |
| **Cancer Type** | | | |
| Larynx | 70(28%) |  | 60(30%) |
| Oral cavity | 102(41%) |  | 104(52%) |
| Pharynx | 73(29%) |  | 30(15%) |
| Nasal cavity | 05(2%) |  | 06(3%) |
| **Status of Cancer** | | | |
| Well differentiated | 110(44%) |  | 114(57%) |
| Moderately differentiated | 57(23%) |  | 40(20%) |
| Poorly differentiated | 83(33%) |  | 46(23%) |
| **Smoking Status (Cigarette, Paan)** | | | |
| Smokers | 163(65%) | 145(58%) | 125(62%) |
| Non-smokers | 87(35%) | 105(42%) | 75(38%) |
| **TNM Staging** | | | |
| T1-T2 | 140(56%) | - | 130(65%) |
| T3-T4 | 110(44%) | - | 70(35%) |
| N0 | 182(72.8%) | - | 102(51%) |
| N1-N3 | 68(27.2%) | - | 98(49%) |
| M0 | 232(92.8%) | - | 186(93%) |
| M1-M2 | 18(7.2%) | - | 14(7%) |

n= numbers, %= percentage, T= T-stage of tumor, N= number of lymph node,

M= metastasis stage of tumor