Supplementary Table 1 Demographics and clinical characteristics of the TCGA

| | Entire cohort | | T12 | T12 | | T34 | |
|----------------|---------------|------|--------|--------|--------|---------|------|
| | (N=153) | | (N=3 | (N=37) | | (N=116) | |
| | Number | % | Number | % | Number | % | Р |
| Age(y) | | | | | | | 0.53 |
| ≤55 | 59 | 38.6 | 17 | 45.9 | 42 | 36.2 | |
| 56-70 | 67 | 43.8 | 15 | 40.5 | 52 | 44.8 | |
| >70 | 27 | 17.6 | 5 | 13.5 | 22 | 19.0 | |
| Gender | | | | | | | 0.44 |
| Male | 111 | 72.5 | 25 | 67.6 | 86 | 74.1 | |
| Female | 42 | 27.5 | 12 | 32.4 | 30 | 25.9 | |
| Stage | | | | | | | |
| T12 | 37 | 24.2 | 37 | 100.0 | 0 | 0.0 | |
| T34 | 116 | 75.8 | 0 | 0.0 | 116 | 100.0 | |
| Smoking status | | | | | | | 0.39 |
| Nonsmokers | 36 | 23.5 | 11 | 29.7 | 25 | 21.6 | |
| Smokers | 115 | 75.2 | 25 | 67.6 | 90 | 77.6 | |
| NA | 2 | 1.3 | 1 | 2.7 | 1 | 0.9 | |
| Alcohol | | | | | | | 0.05 |
| Nondrinkers | 40 | 26.1 | 15 | 40.5 | 25 | 21.6 | |
| Drinkers | 109 | 71.2 | 22 | 59.5 | 87 | 75.0 | |
| NA | 4 | 2.6 | 0 | 0.0 | 4 | 3.4 | |
| Race | | | | | | | 0.62 |
| White | 137 | 89.5 | 34 | 91.9 | 103 | 88.8 | |
| African | 12 | 7.8 | 2 | 5.4 | 10 | 8.6 | |
| Asian | 2 | 1.3 | 1 | 2.7 | 1 | 0.9 | |
| NA | 2 | 1.3 | 0 | 0.0 | 2 | 1.7 | |
| Tumor site | | | | | | | 0.4 |
| Oral cavity | 103 | 67.3 | 28 | 75.7 | 75 | 64.7 | |
| Oropharynx | 26 | 17.0 | 7 | 18.9 | 19 | 16.4 | |
| Larynx | 21 | 13.7 | 2 | 5.4 | 19 | 16.4 | |
| Hypopharynx | 2 | 1.3 | 0 | 0.0 | 2 | 1.7 | |
| Lip | 1 | 0.7 | 0 | 0.0 | 1 | 0.9 | |
| ashart | | | | | | | |

cohort

Notes: Baseline characteristics between the T12 group and the T34 group were compared with the Pearson $\chi 2$ test.