

**S2 Table.** Detailed information on the underlying disease of subjects

| Underlying diseases     | Upfront LPS<br>(n=59) | Upfront RT<br>(n=126) | p-value |
|-------------------------|-----------------------|-----------------------|---------|
| Hypertension            | 19                    | 36                    |         |
| Diabetes                | 6                     | 22                    |         |
| Cerebrovascular disease | 1                     | 5                     |         |
| Heart disease           | 2                     | 7                     |         |
| Renal disease           | 2                     | 5                     |         |
| Liver disease           | 0                     | 4                     |         |
| Endocrine disease       | 0                     | 1                     |         |
| Infectious disease      | 1                     | 1                     |         |
| Total                   | 31 (52.5)             | 81 (64.3)             | 0.148   |

Values are presented as number (%). LPS, larynx-preserving surgery; RT, radiation therapy.