

**Table S1.** Mean values and standard deviations for the acoustic and aerodynamic measures.

| <b>Measure</b>                | <b>Typical</b> | <b>NPVH</b>   |
|-------------------------------|----------------|---------------|
| <b>SPL</b>                    |                |               |
| <b>Baseline</b>               | 80.8 (5.9)     | 75.8 (5.3)    |
| <b>Lombard</b>                | 87.2 (5.5)     | 83.1 (5.6)    |
| <b>Recovery</b>               | 81.9 (6.2)     | 80.1 (5.4)    |
| <b>MFDR (L/s<sup>2</sup>)</b> |                |               |
| <b>Baseline</b>               | 276.5 (61.8)   | 236.8(64.7)   |
| <b>Lombard</b>                | 460.4 (103.1)  | 507.9 (103.4) |
| <b>Recovery</b>               | 277.5 (79.6)   | 341.9 (98.2)  |
| <b>ACFL (mL/s)</b>            |                |               |
| <b>Baseline</b>               | 202.1 (52.2)   | 185.8 (45.6)  |
| <b>Lombard</b>                | 294.2 (87.1)   | 353.3 (76.4)  |
| <b>Recovery</b>               | 216.8 (72.3)   | 259.8(74.9)   |
| <b>OQ<sub>f</sub> (%)</b>     |                |               |
| <b>Baseline</b>               | 68.1 (9.3)     | 76.4 (10.8)   |
| <b>Lombard</b>                | 60.7 (10.6)    | 67.5 (12.8)   |
| <b>Recovery</b>               | 68.7 (9.5)     | 71.3 (71.2)   |
| <b>SGP(cmH20)</b>             |                |               |
| <b>Baseline</b>               | 8.2 (2.1)      | 8.3 (2.1)     |
| <b>Lombard</b>                | 10.5 (2.8)     | 10.7(2.8)     |
| <b>Recovery</b>               | 8.5 (2.1)      | 8.9(2.5)      |

*Note.* SPL = sound pressure level; ACFL = peak-to-peak airflow; MFDR = maximum flow declination rate; OQ<sub>f</sub> = airflow waveform open quotient; SGP = subglottal air pressure.