**Supplemental Table 2.** Sensitivity Analysis: LASSO regression analysis of risk factors for hypoxemia (SpO2<90% for ≥ 3 minutes continuously) in young children undergoing thoracic surgery and OLV excluding cases where OLV start and stop times were manually derived.

|  |  |  |  |
| --- | --- | --- | --- |
| N=221 | Odds Ratio | 95% CI | P Value |
| Age  | 0.95 | 0.54 - 1.62 | 0.864 |
| ASA 3 or 4 (%)  | \* | - | - |
| Left Sided Cases | 0.52 | 0.259 - 1.03 | 0.062 |
| OLV Duration  | 1.20 | 0.97 - 1.50 | 0.097 |
| Bronchial Blocker | 0.46 | 0.207 - 0.97 | 0.048 |
| Preop SpO2<98%  | 1.14 | 0.382 - 3.11 | 0.801 |
| Lower Tidal Volume Ventilation  | 1.72 | 0.74 - 3.88 | 0.199 |
| VATS | 0.95 | 0.41 - 2.31 | 0.907 |
| Type of Surgery |  |  |  |
| 1 | \* | - | - |
| 2 | \* | - | - |
| 3 | 0.18 | 0.01 - 1.02 | 0.114 |
| 4 | 0.67 | 0.171 - 2.20 | 0.536 |

LASSO = least absolute shrinkage and selection operator; SpO2=oxygen saturation; OLV=one lung ventilation; VATS= video assisted thoracoscopic surgery; Type of surgery: 1 = lung wedge or lobe resection, 2 = pleurodesis or decortication, 3 = mediastinal surgery, 4 = other.

\*Covariate beta-coefficient reduced to 0 by LASSO regression method.

The Lamda values used for analysis ranged from 0.00001 to 0.05. The optimal lambda value was λ= 0.024 with alpha value of 1.