**Supplemental Data**

**Tracheostomy for COVID-19: Multidisciplinary, Multicenter Data on Timing, Technique, and Outcomes**

To assess if the association of earlier tracheostomy with shorter duration of ventilation was related to patient factors, we performed a multivariable Cox proportional hazard (PH) regression model for the subset of patients who were weaned from the ventilator. Time to ventilator weaning from intubation was the outcome. We included time to tracheostomy (categorized as early, middle or late) as the variable of interest, and controlled for age, gender, race, BMI, ARDS (none, mild, moderate, severe), technique (percutaneous or surgical), and diabetes.

There were 78 patients who were weaned off the ventilator; 3 were missing information on date of weaning which happened in long-term acute care facility after the hospital discharge and 2 were missing other covariate information, thus the model included 73 patients. Among patients who were weaned, after controlling for the other specified factors, there was no significant association between time to ventilator weaning and tracheostomy timing and other patient factors, as shown in **Supplemental Table 1.**

**Supplemental Table 1.**

**Multivariable Cox PH model between time to ventilator weaning and covariates of interest**

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| **Covariates** | **Wald Chi-Square** | **P- value** |
| Tracheostomy Timing Groups | 4.883 | 0.087 |
| Age | 2.515 | 0.112 |
| Gender | 0.038 | 0.844 |
| Race | 0.664 | 0.881 |
| BMI | 0.627 | 0.428 |
| ARDS | 4.178 | 0.124 |
| Diabetes | 2.867 | 0.090 |
| Procedure Technique | 0.829 | 0.362 |