Management of Respiratory Failure
Suspected or confirmed COVID-19

- **Low Work of breathing**
  - Monitor closely
  - Target SpO2 90%-96%
  - Appropriate PPE
  - If worsening, do not delay intubation

- **High Work of breathing**
  - ECHO early

- **SpO2 <90%, FiO2 >70%, high WOB, RR, ...**
  - Indication for Intubation?

- **Intubation and MV**
  - Pressure Control - aim VT 8ml/kg PBW
  - PEEP 8 cm H2O

- **Is Driving Pressure <15 cm H2O?**
  - Yes
  - If no shock at presentation low dose vasoconstrictors - minimise fluids (Euvolaemia)
  - SpO2 <90% and FiO2 >70%
  - Neuromuscular blockade
  - Increase PEEP in steps of 2 up to 15 cmH2O
  - SpO2 <90% and FiO2 >70%
  - Compliance >40 ml/cmH2O
  - Prone +/- adjust ventilation

- **No**
  - SpO2 <90% and FiO2 >70%
  - Reduce to VT 6ml/kg PBW

- **Targets:**
  - SpO2 >90-94%
  - PaO2≥8kPa
  - pCO2 <8 or pH≥7.25
  - Pff≤30 cm H2O
  - ΔP≤15 cm H2O

- **Consider: Prone +/- APRV**

- **Unsuccessful**
  - Intubate!
  - Call MERIT team
  - Intubation guidelines

- **CALL BEFORE STARTING APRV: INITIAL SUGGESTED SETTINGS**
  - Phigh 26-28 cmH2O; Plow 0 cmH2O
  - Thigh 5 s; Tlow 0.5 s; Slope 0

- **Hypoxaemia refractory to prone and APRV for >6 hours, or sooner if life threatening**
  - Consider ECMO