Appendix 1. This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

**St Vincent’s Hospital Department of Critical Care ventilation Guidelines**

**Mechanical Ventilation – General**
- Tidal volume ≤6 mL/kg PBW
  - Men: 50 + 0.91 (Height in cm – 152.4 cm)
  - Women: 45.5 + 0.91 (Height in cm – 152.4)
- Respiratory frequency for pH
- PEEP as required for FiO₂ ≤0.50

**Mechanical Ventilation – Acute Respiratory Distress Syndrome**
Definition ARDS (‘Berlin’ definition, JAMA June 20 2012 Vol 307;23):
- Timing: within 1 week of a known clinical insult
- Bilateral infiltrates on CXR
- Origin of oedema and respiratory failure not fully explained by cardiac/fluid overload
- PaO₂/FiO₂ ratio:
  - Mild 200-300 with PEEP >5cmH₂O
  - Moderate 100-200 with PEEP >5cmH₂O
  - Severe <100 with PEEP >5cmH₂O

Components:
- Pressure control mode (BiPAP, BiPAP/SIMV, PCV, PRCV, Bivent)
- Tidal volume ≤6 mL/kg PBW
- Reduce further to minimum 4 mL/kg if plateau pressure >30 cmH₂O
- Increase to 7-8 mL/kg if dyspnoea and plateau pressure <30 cmH₂O
- Frequency for pH > 7.15
- Plateau pressure > 30 cm H₂O only if:
  - Tidal volume <4 mL/kg
  - pH <7.15
- Standard PEEP combinations:

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<td>8</td>
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<td>12</td>
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<td>14</td>
<td>16</td>
<td>18</td>
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</tbody>
</table>

- Aim for PaO₂ 55-80, SpO₂ 88-95.
- PEEP adjustments on order of consultant, the above table is a guide only.