INITIAL CLINICAL ASSESSMENT
- Able to speak in sentences
- Wheeze? Loud / Soft
- Pulsus paradoxus

INITIAL MANAGEMENT
- Nebulised bronchodilators - avoid excessive B2 agonists due to tachycardia and tachyphylaxis - use antimuscarinics
- Nebulised plus IV Magnesium
- Nebulised plus IV steroids (for airway hyperaemia)
- Ensure good humidification
- Persistent spasm - consider inhalational anaesthetics, ketamine

TRIAL OF NIV
- Good verbal reassurance, and ensure good mask fit
- Use high PIP if required
- If dysynchrony:
  - Increase EPAP to match autoPEEP
  - Shorten duration of inspiration and inspiratory rise time
  - Ensure adequate leak compensation, strong verbal reassurance
  - Consider use of mild sedation in monitored environment

INITIAL VENTILATOR SETTINGS
- Slow initial ventilatory rate to maximise expiratory time
- Low airway pressures to reduce risk of pneumothorax
- Accept permissive hypercapnoea
- Low / Moderately low PEEP
- Optimise secretion clearance - physiotherapy, humidification, mucolytics, intermittent high TV => high exp. pressure & flow

VENTILATORY WAVEFORM ASSESSMENT
- Monitor Ppeak-Pplat differential as indicator of airway spasm
- Monitor for Intrinsic PEEP:
  - Monitor End expiratory flow as indicator of intrinsic PEEP
  - If Volume Control IPPV, monitor rise in Pplat over time
  - If Pressure Control IPPV, monitor fall in tidal volumes over time

CLINICAL / VENTILATORY DETERIORATION - MANAGEMENT
- Worsening pCO2, worsening autoPEEP:
  - Change HME, consider changing ETT
  - Trial chest compression disconnected from ventilator to relieve thoracic compartment syndrome
  - Trial increase PEEP / NMBs to minimise dynamic airway compression and equalise alveolar T1/2
  - Trial proning to optimise V/Q matching
  - Exclude pneumothorax, RV distension, Low cardiac output
  - Cautious trial of HFO - may worsen autoPEEP, requires close haemodynamic monitoring
  - Early use of ECCO2R to minimise VILI

WEANING on PS / NIV
- See section on NIV
- Consider early extubation to NIV to reduce VAP risk

INTUBATION
- Ensure good IV access, adequate hydration
- Vasopressors to hand
- Hi dose analgesic induction, use lignocaine to spray cords and have IV lignocaine to hand
- Avoid carinal stimulation - use a pre-cut ETT