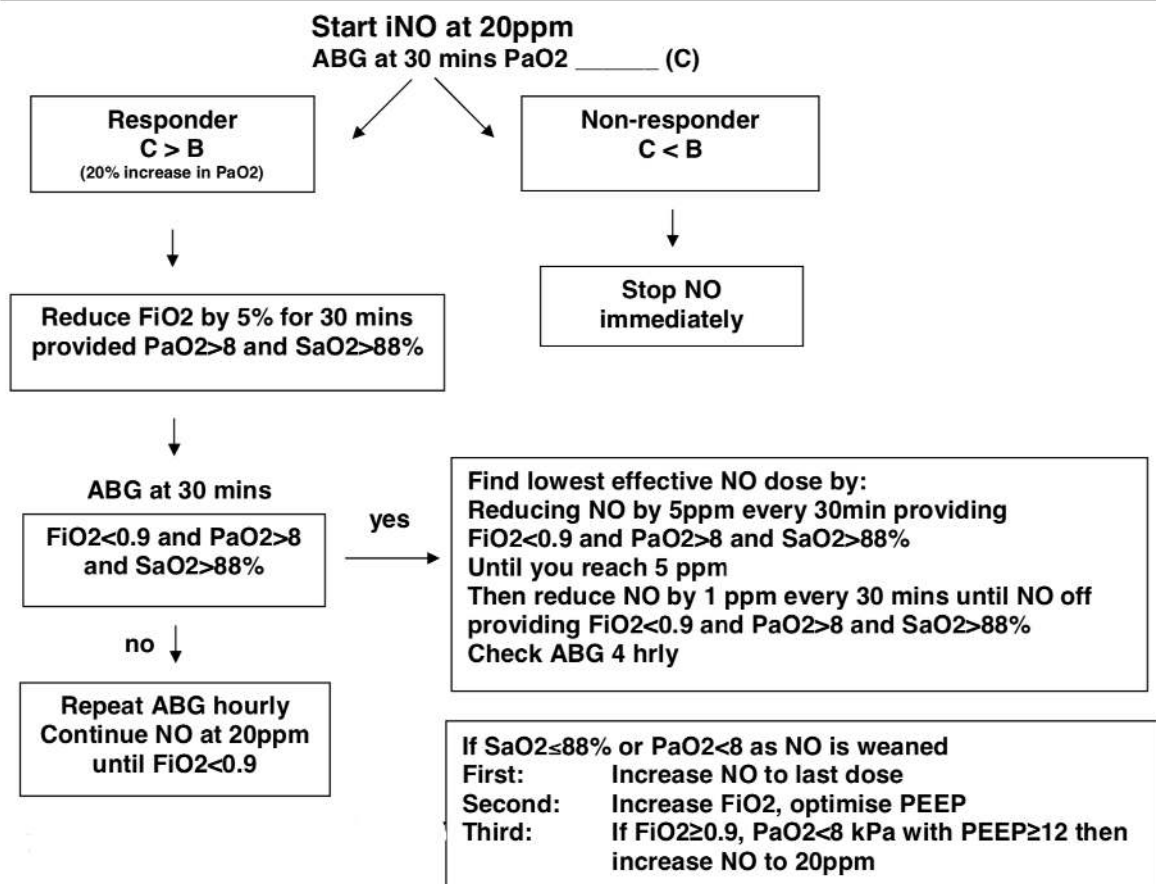


## Inhaled Nitric Oxide (iNO) for severe hypoxaemia

- For unselected patients with ARDS iNO is associated with transient improvements in oxygenation but does not carry a mortality benefit and increases renal dysfunction.
- The use of iNO for hypoxaemic patients with ARDS should be severely limited to those in whom other rescue therapies are not possible but are believed to have a recoverable disease process eg severe hypoxaemia while awaiting ECMO retrieval – in consultation with ECMO referral centre with consideration as to whether in-house ECMO is necessary/possible if prolonged retrieval anticipated. The use of iNO should **ALWAYS** be a consultant led decision.
- Patients in this category would typically have a PaO<sub>2</sub> of < 8 kPa with FIO<sub>2</sub> > 0.9 and PEEP > 10 following consideration of prone ventilation, neuromuscular blocking drugs and ECMO.

### Suggested titration of iNO for severe hypoxaemia:

1. Do blood gas immediately before starting nitric oxide PaO<sub>2</sub> \_\_\_\_ (A)  
2. Document settings: Mode \_\_\_\_ Vt \_\_\_\_ RR \_\_\_\_ Ppeak \_\_\_\_ Pplateau \_\_\_\_ PEEP \_\_\_\_ I:E \_\_\_\_  
3. Calculate A x 1.2 \_\_\_\_ (B)  
4. Start NO at 20ppm for 30 min Keep ventilator settings and FiO<sub>2</sub> constant during this time  
5. Take blood gas at 30min  
**DOCUMENT ALL GASES OVERLEAF**



- Rebound pulmonary hypertension can occur on withdrawal of iNO therapy with hypoxaemia or haemodynamic compromise.
- iNO may also be used under specialist advice in cases of right heart failure and pulmonary hypertension and falls out-with this guidance.
- Methaemoglobin levels should be monitored during therapy with iNO at 0 hours, 1 hour, 6 hours then daily, and iNO is contra-indicated in patients with congenital or acquired methaemoglobin reductase deficiency.
- Relative contra-indications to iNO therapy include severe coagulopathy, intracranial haemorrhage and severe left ventricular failure.

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