## **Appendix 1**

## **Full inclusion and exclusion criteria of NETT**

## Inclusion criteria

- History and physical examination consistent with emphysema.
- \* CT scan evidence of bilateral emphysema.
- Completed 6 to 10 weeks of supervised pulmonary rehabilitation.
- ❖ BMI <31 males, <32 female.
- ❖ FEV1<45%.
- ❖ PaCO₂<60 mmHg.
- ❖ PAo₂>45 mmHg.
- **♦** 6MWT >140 m.
- No smoking for at least 4 months before initial screening.

## Exclusion criteria

- CT evidence of diffuse emphysema judged unsuitable for LVRS.
- Previous LVRS.
- Pleural or interstitial disease that precludes surgery.
- ❖ Giant bulla (≥one third of lung volume).
- Clinically significant bronchiectasis.
- Pulmonary nodule requiring surgery.
- Previous sternotomy or lobectomy.
- ❖ Myocardial infarction within 6 months of interview and ejection fraction <45%).

- ❖ CHF within 6 months and EF <45%.
- Uncontrolled hypertension.
- Pulmonary hypertension mean P<sub>PA</sub> on RHC ≥35 mmHg or peak systolic P<sub>PA</sub> 45 mmHg.
- Unplanned, unexplained weight loss >10% usual weight within 90 days.
- History of recurrent infections with daily sputum production judged significant.
- ❖ Daily use of  $\geq$ 20 mg of prednisolone.
- History of exercise induced syncope.
- \* Resting bradycardia <50 bpm, frequent multifocal PVC's, complex ventricular arrhythmia or sustained SVT.
- Cardiac dysrhythmia that poses a risk to the patient during exercise or training.
- ❖ Oxygen requirement during resting or oxygen titration >6 L/min to keep sats ≥90%.
- Evidence of systemic disease or neoplasia that is expected to compromise survival.
- ❖ Any disease or condition that may interfere with completion of tests, therapy or follow up.
- ❖ 6MWD ≤140 m post rehabilitation.
- Inability to complete successful any of the screening or baseline data.
- High risk patients were excluded including FEV1 <20% and either homogenous emphysema or a carbon monoxide diffusing capacity that was 20% below predicted.