### Supplementary TABLE 1.

**The Melbourne Group Scale Version 2 (Criteria for Diagnosis of a Postoperative Pulmonary Complication)**

Diagnosis confirmed when four or more of the following are present:

- Chest radiograph report of consolidation/collapse
- Raised temperature > 38°C on two or more consecutive days
- Pulse oximetry saturation of oxygen (SpO₂) < 90% on room air on two consecutive days
- Production of yellow or green sputum which is different to preoperative assessment
- An otherwise unexplained white cell count > 11 × 10⁹ L⁻¹ or prescription of an antibiotic specific for respiratory infection
- Physician diagnosis of chest infection
- Presence of infection on sputum culture report
- Abnormal breath sounds on auscultation which differ from preoperative assessment
Supplementary TABLE 2.

Definitions of Postoperative Pulmonary Complications

Diagnosis confirmed by two independent doctors:

**Acute lung injury**

Acute onset of hypoxemia (partial pressure of oxygen in arterial blood [PaO₂]/fraction of inspired oxygen [FIO₂] ≤ 300 mmHg) with new bilateral infiltrates in the setting of either a normal pulmonary arterial wedge pressure (PAWP ≤ 18 mmHg) or the absence of suspected of left atrial hypertension when PAWP is not available.

**Acute respiratory distress syndrome (ARDS)**

ARDS is a special type of acute lung injury. In the setting of more severe hypoxemia (PaO₂/FIO₂ ≤ 200 mmHg), the term ARDS is applied.

**Pleural effusion**

Chest radiograph demonstrating blunting of the costophrenic angle, evidence of displacement of adjacent anatomical structures, or (in supine position) a hazy opacity in one hemithorax, with preserved vascular shadows.

**Atelectasis**

Collapse of the alveoli, lung opacification with shit of the mediastinum, hilum, or hemidiaphragm toward the affected area, and compensatory overinflation in the adjacent nonatelectatic lung.