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**Title:** Complications following bronchoscopic lung volume reduction (BLVR) – A small case series

Dr. Jurgen 17671 Herre [jh648@cam.ac.uk](mailto:jh648@cam.ac.uk) MD <sup>1</sup>, Mr. Tom 17672 Dymond [tom.dymond@addenbrookes.nhs.uk](mailto:tom.dymond@addenbrookes.nhs.uk) <sup>2</sup>, Dr. Pasupathy 17673 Sivasothy [pasupathy.sivasothy@addenbrookes.nhs.uk](mailto:pasupathy.sivasothy@addenbrookes.nhs.uk) MD <sup>1</sup> and Dr. Ravi 17674 Mahadeva [ravi.mahadeva@addenbrookes.nhs.uk](mailto:ravi.mahadeva@addenbrookes.nhs.uk) MD <sup>1</sup>. <sup>1</sup> Department of Respiratory Medicine, Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge, Cambridgeshire, United Kingdom, CB2 2QQ and <sup>2</sup> Lung Function Unit, Cambridge University Hospitals NHS Foundation Trust, Cambridge, Cambridgeshire, United Kingdom, CB22QQ .

**Body:** Introduction BLVR with endobronchial valves (Pulmonx) is an emerging alternative to failing medical therapy for severe disabling emphysema and carries a much lower mortality than Surgical LVR. Common complications include exacerbations, bronchospasm, valve occlusion and dislodgement and pneumothorax, the latter usually due to ipsilateral non-target lobe re-expansion. Aims and objectives We report our experience of 5 patients who suffered significant complications following endobronchial valve (EBV) treatment and describe their subsequent management. Methods Retrospective analysis of 10 cases from 2009 – 2012 describing complication and remedial action, effects of valve removal and morbidity post removal. Results Over the first 3 months post procedure, BLVR patients experienced cumulatively 8 significant complications: 3 pneumothoraces within 1 month requiring underwater drain, additionally 1 required blood patch and valve removal, 1 intubation and valve removal. Others; 1 valve removed for post-obstructive pneumonia, 1 valve repositioning following cough dislodgement, 1 small pleural effusion and 2 mild COPD exacerbations. All survived, 7/10 still have valves in situ and PFT returned to baseline in the patients who had valves removed. Conclusions: Bronchoscopic EBV has predictable complications that, in light of the severity of the underlying emphysema, have the potential to be serious. Nevertheless, the potential benefits, which outstrip pharmacological therapy, make it important to counsel patients of these potential risks and ensure careful patient selection and follow-up by specialists. Reassuringly, all patients in our group recovered back to baseline following complications.