Objective: Advanced age is not a barrier to cardiac surgery, with reports demonstrating excellent outcome, but the effect of age on more complex operations has not been studied. We assessed our outcome for pulmonary endarterectomy (PEA) surgery in patients aged over 70 years.

Methods: Retrospective review of consecutive patients who underwent PEA between January 2006 and February 2011 at a national referral centre. The total cohort was dichotomised according to age of 70 years. We assessed in hospital mortality, overall survival, ICU and hospital stay.

Results: 411 patients (103 aged 70 years or older) underwent PEA during this period. Mean age for the whole cohort was 56.9 years (range 17-84). In-hospital mortality was 14/308 (4.6%) in patients under 70 years compared with 8/103 (7.8%) in > 70 years (p=0.21). Overall survival at 1, 2 and 3 years was 91.4%,
89.9% and 87.7% in the younger group and 85.9%, 84.1% and 84.1% in the older (log-rank test p=0.07). ICU and in-hospital stay were longer in the older group, by 1 and 2 days respectively (p=0.005 and 0.001).

**Conclusion**: PEA surgery appears to be safe in the elderly, but there is an increase in resource use due to longer ICU and hospital stay. Advanced age should be taken into consideration when assessing suitability for pulmonary endarterectomy, but is not a contraindication to surgery.