We made a decision early in our lung volume reduction (LVR) experience to offer a staged bilateral approach with the timing of each additional intervention determined by patient choice and have latterly incorporated the use of endobronchial valves into this protocol. We have analysed the long-term effect on patient outcome of this novel approach. Over a 20 year period 329 LVR procedures were performed on 256 patients (157 male, 99 female, median age 61 [23–79] years) by a single surgeon in one institution. Baseline lung function showed predicted values (mean +/-SE): FEV1 28 (11)%, RV 253 (53)%, DLCO 39 (39)%. 64 patients have received a second LVR and 13 a third LVR procedure (fig). Median time between first and second stage was 3.8 (0.1–12.5) years. The time interval between 2nd and 3rd stage was 2.7 (0.2–5.2) years. Median time interval between 1st and 3rd stage was 5.8 (1.9–10) years. Overall 30 day mortality was 3% (20% after open, 3% after VATS and 3% after EBV). Median overall survival was 5.6 (95% CI 4.7–6.9) years. In the subgroup of patients who underwent staged procedures there was a significant improvement in mean predicted FEV1 from 28% at initial baseline to 34% at 6 years. There was a sustained reduction in static lung volumes up to 8 years: predicted TLC remained reduced from 143% to 123% and predicted RV from 259% to 189%. The physiological improvements after first and second stage were similar. There were also sustained improvements over initial baseline in health status as assessed by Euroqol for 5 years [50 (+/-26) to 62 (+/-23), p<0.001] en in SF36: perception of the physical role was significantly improved for up to 7 years, social functioning for 8 years. Energy levels remained significantly higher for 9 years with 20% of patients scoring better than preoperatively. A staged unilateral video assisted surgical and endobronchial approach to lung volume reduction dictated by the patient is justified by a sustained benefit for up to 9 years in physiology and health status in patients with severe emphysema who had already received maximal medical therapy.