Body: Introduction: We previously published evidence of EMT-Type-3, a pre-malignant condition associated with hyper-vascularity of the reticular basement membrane (Rbm), in COPD airways. COPD involves scarring and obliteration of the small airways (SAs) and is also closely associated with development of airway epithelial malignancies predominantly in large airways (LAs). Objective: This study investigated evidence of active EMT in SAs in multiple lung resection sections from ten patients with lung cancer undergoing thoracotomy, compared with matched LAs endobronchial biopsies (ebb). All patients had evidence of SAs obstruction on lung function testing. Methods: SAs and matching LAs ebb were assessed for Rbm fragmentation and cell markers of EMT, i.e. vimentin, N-cadherin, E-cadherin, S100A4, and matrix-metalloproteinase-9 (MMP-9) and also the marker of epithelial activation, epidermal growth factor receptor (EGFR). Vessels were stained with type-IV collagen, CD-31 and factor-8. Results: Rbm fragmentation was evident in the SAs. Epithelium in SAs stained positively for vimentin, S100A4 and N-cadherin. Concomitant expression of E and N-cadherin was also observed, indicating possible E/N-cadherin switching. There were also cells present within Rbm clefts that were positive for these EMT markers but not MMP-9, but no vessel staining was observed in SAs Rbm. The LAs again demonstrated likely active EMT-Type-3 with evidence of hyper-vascularity in the Rbm. Conclusions: This is the first study to contrast active EMT-Type-2 in SAs potentially contributing to SAs fibrosis seen in COPD and active EMT-Type-3 in the LAs, where cancer formation is common.