

**Supplemental Figure # 4**

(A) Contrast axial chest computed tomographic scan of subject #4 at the level above the carina demonstrating a mediastinal mass primarily anterior to the central airways. “M” indicates the mass. Red arrow indicates compressed distal trachea and left mainstem bronchus. (B) Digital virtual bronchoscopy of the region of central airway stenosis from the same patient. (C) Actual bronchoscopic still picture of the left mainstem bronchus during baseline, awake, spontaneous ventilation, and (D) during general anesthesia maintaining spontaneous ventilation, and (E) during general anesthesia with positive pressure ventilation, and (F) during general anesthesia with positive pressure ventilation and neuromuscular blockade. (**See Supplemental Video # 4**).