

## AB009. Comparison of uniportal and multiportal video-assisted thoracoscopic (VATS) complicated segmentectomy: a propensity score matching analysis

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**Background:** Complicated segmentectomy, which is defined as a segmentectomy not belonging to the conventional segmentectomy, is considered as a more difficult technique in uniportal video-assisted thoracoscopic (VATS) approach. Rare literature discussed about uniportal VATS complicated segmentectomy and its comparison with multiportal approach. We want to compare the perioperative outcomes of uniportal and multiportal VATS complicated segmentectomy.

**Methods:** A total of 187 patients underwent uniportal or multiportal VATS complicated segmentectomy in NCKUH from July 2010 to March 2017. The patients who underwent synchronous bilateral surgery, double anatomical resections, and repeated surgery were excluded. A crude

comparison and a propensity score matching analysis, incorporating preoperative variables, were conducted to elucidate the short-term outcomes between uniportal and multiportal VATS complicated segmentectomy.

**Results:** The presenting study includes 96 uniportal and 68 multiportal VATS complicated segmentectomy between July 2010 and March 2017. A propensity score matching yielded 56 patients in each group. The operation time and blood loss were not significantly different between these two groups. Uniportal VATS complicated segmentectomy had a shorter duration of pleural drainage and postoperative hospital stay (2.8 *vs.* 3.6 days and 4.2 *vs.* 5.3 days, respectively) ( $P < 0.01$ ). Both the intraoperative and postoperative complication rates were not significantly different as well. No 30-day mortality was observed in our series.

**Conclusions:** VATS complicated segmentectomy in uniportal approach are feasible, and comparable with those of the multiportal approach in short-term perioperative outcomes.

**Keywords:** Uniportal; multiportal; complicated segmentectomy; propensity score

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