

SCA 71
MINIMALLY INVASIVE RESECTION DOES NOT ALTER
THE SHORT-TERM INFLAMMATORY RESPONSE TO
LOBECTOMY

Heerdt P, Amar D, Zhang H, Park B, Flores R
Memorial Sloan-Kettering Cancer Center, New York, NY, USA

With the rapid emergence of minimally invasive surgical techniques, video-assisted thoracoscopic surgery (VATS) has expanded to include robotic-assisted lobectomy under the assumption that smaller incisions without rib spreading will dampen the inflammatory response and accelerate recovery. To date, studies supporting this assumption are limited by inconsistencies in regard to patient demographics and the magnitude of anatomic resection (i.e. wedge vs lobectomy). The present study was designed to compare the postoperative elaboration of serum inflammatory markers following open or VATS lobectomy in age and gender matched groups. Methods: 16 patients (8 open, 8 VATS) matched for age (69.81.5 yr vs 70.01.6 yr) and gender (6 female/2 male) were studied. Blood was obtained from each patient preoperatively (baseline), immediately after extubation and transport to the PACU (PACU), and on post-

operative day (POD) 1. The duration of hospital stay was recorded and blood samples subsequently assayed for high sensitivity C-reactive protein (CRP) and interleukin-6 (IL-6). Differences in hospital stay as well as CRP and IL-6 levels at each time point were determined by t-test. For all tests, a $p < 0.05$ was considered significant (* in figures). Results: As shown in figure 1, open lobectomy patients required longer hospitalization than those undergoing VATS. However, there was no difference in postoperative CRP (fig.2) and the initial rise in IL-6 (PACU) was actually higher following VATS (fig. 3). Conclusions: While the data support shorter hospitalization following VATS lobectomy, they are not consistent with a clearly reduced inflammatory response as indexed by CRP and IL-6.

