



# Extended VTE Prophylaxis Following Lung Cancer Resection, An Important Consideration

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## Editorial

The Venous Thromboembolism (VTE) is an important medical complication in thoracic surgery patients. The National Surgical Quality Improvement Program (NSQIP) reported the VTE incidence of 1.6% following anatomical lung resection, 44% of this befell following hospital discharge [1]. The postoperative VTE can increase the mortality eight times after lung cancer resection [2]. The clinical burden of post-op VTE in thoracic surgery is probably underestimated because majority of patients are asymptomatic [3,4]. Although there are data to suggest that the risk for VTE extends beyond discharge, few patients are managed with post-discharge prophylaxis [5]. VTE prophylaxis can decrease the associated morbidity and mortality and alleviate patients' pain. Extended prophylaxis guidelines do exist for subsets of patients undergoing abdominal and pelvic surgery [6]. The highest incidence of VTE is within 1 month after lung resection surgery in higher risk population (elderly, obesity, pneumonectomy, incomplete resection, immobility, high Caprini score). The Caprini score provides suitable risk stratification for lung cancer patients from low risk (score 0 to 4), moderate risk (score 5 to 8) and high risk (score >9). The American Society of Clinical Oncology Guidelines 2014 recommends the extended prophylaxis in this group [7]. The NICE guidelines 2018 recommend VTE prophylaxis but quiet on the extended period in thoracic surgery. The ESTS (European Society of Thoracic Surgeons) considers VTE a significant cause of morbidity and mortality after thoracic surgery but at the time no thoracic surgery specific guidelines are present [8]. The Society for Translational Medicine with the collaboration of China National Research Collaborative Group on Venous Thromboembolism in Thoracic Surgery set up a working group to develop the assessment and prevention of VTE and published the first ever VTE guidelines specifically for lung cancer patients in 2018 [9]. Considering the significant impact of VTE on life, I would highly recommend that all cardiothoracic surgeons should adapt a departmental policy for extended VTE prophylaxis for 4 weeks.

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