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11<sup>th</sup> International Meeting on General Thoracic Surgery



Hospital  
Universitari  
Sagrat Cor

10<sup>th</sup> International Workshop on Surgical Exploration of the  
Mediastinum and Systematic Nodal Dissection



5<sup>th</sup> Meeting of the Thoracic Oncology, Thoracic  
Surgery, Techniques & Transplant, Respiratory Nursing  
and Respiratory Physiotherapy Areas of the Spanish  
Society of Pneumology and Thoracic Surgery (SEPAR)



3<sup>rd</sup> Joint Meeting of the Spanish Society of  
Thoracic Surgery (SECT)



30<sup>th</sup> Congress of the "Asociación Iberoamericana  
de Cirugía Torácica" AIACT



10<sup>th</sup> International Workshop on Surgical Exploration of the  
Mediastinum and Systematic Nodal Dissection



## DOES NEOADJUVANT IMMUNOTHERAPY INFLUENCE SURGICAL PERFORMANCE?

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**Objective:** In the arsenal of treatments used for lung cancer, immunotherapy has emerged as a revolutionary milestone in patient survival. However, there is enough observational evidence to affirm that tissue changes hinder the procedure. Our aim is to compare such changes visually. **Methods:** We obtained two patients with similar medical history, who underwent the same type of lung resection, both robot-assisted, differing only in that one completed neoadjuvant immunotherapy treatment while the other did not. Both surgeries were recorded and their different steps were compared visually. **Results:** The patient who did not complete neoadjuvant treatment is called patient "A", while the patient who completed neoadjuvant treatment is called patient "B". The quality of the adipose tissue is different, being less vascularized and more fibrotic in B than in A. The fibrotic reaction even contributes to a lesion on the middle lobe bronchus. The structural quality of the bronchus prevents a primary suture technically obliging to perform an inferior bi-lobectomy. The final pathologic anatomy of both shows a complete pathologic response in B, while in A viable tumor cells persist, necessitating continued adjuvant treatment. **Conclusions:** While immunotherapy treatment is a therapeutic revolution for our patients, surgery continues to be the common final route of definitive treatment. The changes induced by immunotherapy in the form of fibrosis are macroscopically evident, often making surgery more difficult, however, it is not impossible for these reasons, allowing the patient to complete his treatment with good evolution.