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11th International Meeting on General Thoracic Surgery



10th International Workshop on Surgical Exploration of the
Mediastinum and Systematic Nodal Dissection



5th Meeting of the Thoracic Oncology, Thoracic
Surgery, Techniques & Transplant, Respiratory Nursing
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Society of Pneumology and Thoracic Surgery (SEPAR)



3rd Joint Meeting of the Spanish Society of
Thoracic Surgery (SECT)



30th Congress of the "Asociación Iberoamericana
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10th International Workshop on Surgical Exploration of the
Mediastinum and Systematic Nodal Dissection



UTILITY OF ARTIFICIAL INTELLIGENCE FOR DECISION MAKING IN THORACIC MULTIDISCIPLINARY TUMOR BOARDS

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Objectives The aim of this study was to analyze whether the implementation of artificial intelligence (AI), specifically the Natural Language Processing (NLP) branch developed by OpenAI, could help a thoracic multidisciplinary tumor board (MTB) make decisions if provided with all the patient data presented to the committee and supported by accepted clinical practice guidelines. **Methods** This is a retrospective comparative study. Inclusion criteria were all patients presented at thoracic MTB with first diagnosis of non-small cell lung cancer between January 2023 and June 2023 have been collected. **Intervention:** GPT 3.5 turbo chat was used, providing the clinical case summary presented in committee and the latest SEPAR lung cancer treatment guideline. The application was asked to issue one of the following recommendations: follow-up, surgery, chemotherapy, radiotherapy, chemo+radiotherapy. **Statistical analysis:** a concordance analysis was performed by measuring the kappa coefficient, to evaluate the consistency between the results of the AI and the committee's decision. **Results** Fifty patients were included in the study. The AI had an accuracy of 76%, with a Kappa index of 0.59 and a consistency and replicability of 92.3% for the patients in whom it recommended surgery (after repeating the cases 4 times). **Conclusions** AI is an interesting tool, which could help in decision-making in MTB. Future lines of research should be oriented towards the standardization of clinical history summaries, updating of guidelines and application of fine-tuning.