



LETTER TO THE EDITOR

Predicting lung nodules malignancy



Dear Editor,

Jacob, et al.¹ in their original article “Predicting lung nodules malignancy” established a prediction model that can be used to assess the probability of malignancy in a Portuguese population, thereby providing help for the diagnosis of lung nodules. They also argue that their model can help decide the need for a lung biopsy and, thus reduce useless invasive techniques.¹

Every year, hundreds of thousands of patients are diagnosed with incidentally detected pulmonary nodules, and after lung cancer screening implementation, thousands more will be identified. However, the ideal approach for assessing pulmonary nodules is still vague, since most published guidelines² do not clearly state which strategy is accompanied by benefit outcomes, namely in surveillance, need for percutaneous/surgical biopsy or just clinical reevaluation.

With the emergence of new approaches such as uniportal and non-intubated video-assisted thoracic surgery (VATS) as well as exciting innovations in intra-operative imaging, VATS not only remains a reliable management option for patients with pulmonary nodules, but also an increasingly attractive one as side effects from anaesthesia and surgical access trauma are further minimized, and surgical accuracy improved.³

Nowadays, awake non-intubated uniportal VATS wedge resection is one of the new frontiers in minimal invasive management of patients with solitary lung nodule and already a standard in the armamentarium of some Portuguese thoracic surgeons.³ The emergence of image guided VATS, hybrid operating theatre and fluorescence thoracoscopy have all contributed to improved precision of VATS lung resection, and are becoming important adjuncts to lung sparing surgery when managing lung nodules diagnosis.

Local anaesthesia awake procedures provide lower costs, shorter hospital stay, shorter anaesthesia and operation times compared to general anaesthesia patients. Other advantages include increased ventilation, fewer respiratory

complications, shorter recovery time and it is not traumatic for the immune system which allows for faster recovery.⁴

In conclusion, there is much debate on the best management of solitary pulmonary nodules. Even if they are mostly benign, they may represent an early-stage lung cancer. Minimally invasive surgical removal is probably the best approach to this insidious disease and should help keep VATS at the forefront of the diagnostic and therapeutic algorithm of lung nodules.

Declaration of Competing Interest

The author has no conflicts of interest to declare.

References

1. Jacob M, Romano J, Araujo D, Pereira JM, Ramos I, Hespanhol V. Predicting lung nodules malignancy. *Pulmonology*. 2022;28 (6):454–60. <https://doi.org/10.1016/j.pulmoe.2020.06.011>.
2. Mazzone P.J., Silvestri G.A., Souter L.H., Caverly T.J., Kanne J. P., Katki H.A., et al. Screening for Lung Cancer: CHEST Guideline and Expert Panel Report *Chest*. 2021 Nov; 160(5): e427–e494. <https://doi.org/10.1016/j.chest.2021.06.063>.
3. Guerra M. Uniportal video-thoroscopic surgery: revolution or evolution. *Rev Port Cir Cardiorac Vasc*. 2015;22(4):199–201.
4. Prisciandaro E, Bertolaccini L, Sedda G, Spaggiari L. Non-intubated thoroscopic lobectomies for lung cancer: an exploratory systematic review and meta-analysis. *Interact Cardiovasc Thorac Surg*. 2020;31(4):499–506. <https://doi.org/10.1093/icvts/ivaa141>.

M. Guerra^{a,b}

^a *Thoracic Surgery, Centro Hospitalar de Vila Nova de Gaia, Portugal*

^b *Faculty of Medicine of Oporto, Portugal*

E-mail address: miguel david guerra@yahoo.com

Received 12 November 2022; Accepted 21 November 2022

Available online 11 January 2023

<https://doi.org/10.1016/j.pulmoe.2022.11.005>

2531-0437/© 2022 Published by Elsevier España, S.L.U. on behalf of Sociedade Portuguesa de Pneumologia. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).