

EP07.13: Adoption and Technical Heterogeneity in Anatomic Segmentectomy in Latin America: Initial Multicenter Survey-Based Analysis

E. Rocha Júnior^{1,2}, L. Leone Lauricella^{1,2}, M. Rodrigues Cremonese^{1,2}, J. Vieira de Oliveira Salerno², R. Faccioli, P.M. Pego-Fernandes¹, R. Mingarini Terra^{1,2}
¹University of São Paulo, ²Einstein Hospital Israelita
Correspondence: eservlr@gmail.com

INTRODUCTION

Anatomical segmentectomy has emerged as a valid alternative to lobectomy for selected patients with early-stage lung cancer. However, the procedure is technically demanding, and variations in surgical planning and operative technique may affect quality. Although international expert recommendations have proposed technical standards, their adoption and applicability in Latin America remain unknown.

METHODS

A cross-sectional survey was conducted among thoracic surgeons practicing in Latin America. The questionnaire assessed demographic characteristics, surgical volume, minimally invasive approaches, use of three-dimensional reconstruction, technical practices, and barriers to performing anatomical segmentectomy. Participants also evaluated 23 statements adapted from the 2023 ESTS expert consensus using a four-point Likert scale. Agreement was defined as the combined proportion of “totally agree” and “mostly agree” responses and classified as high ($\geq 90\%$), moderate (75–89%), or low ($< 75\%$).

RESULTS

1 STUDY POPULATION AND ADOPTION

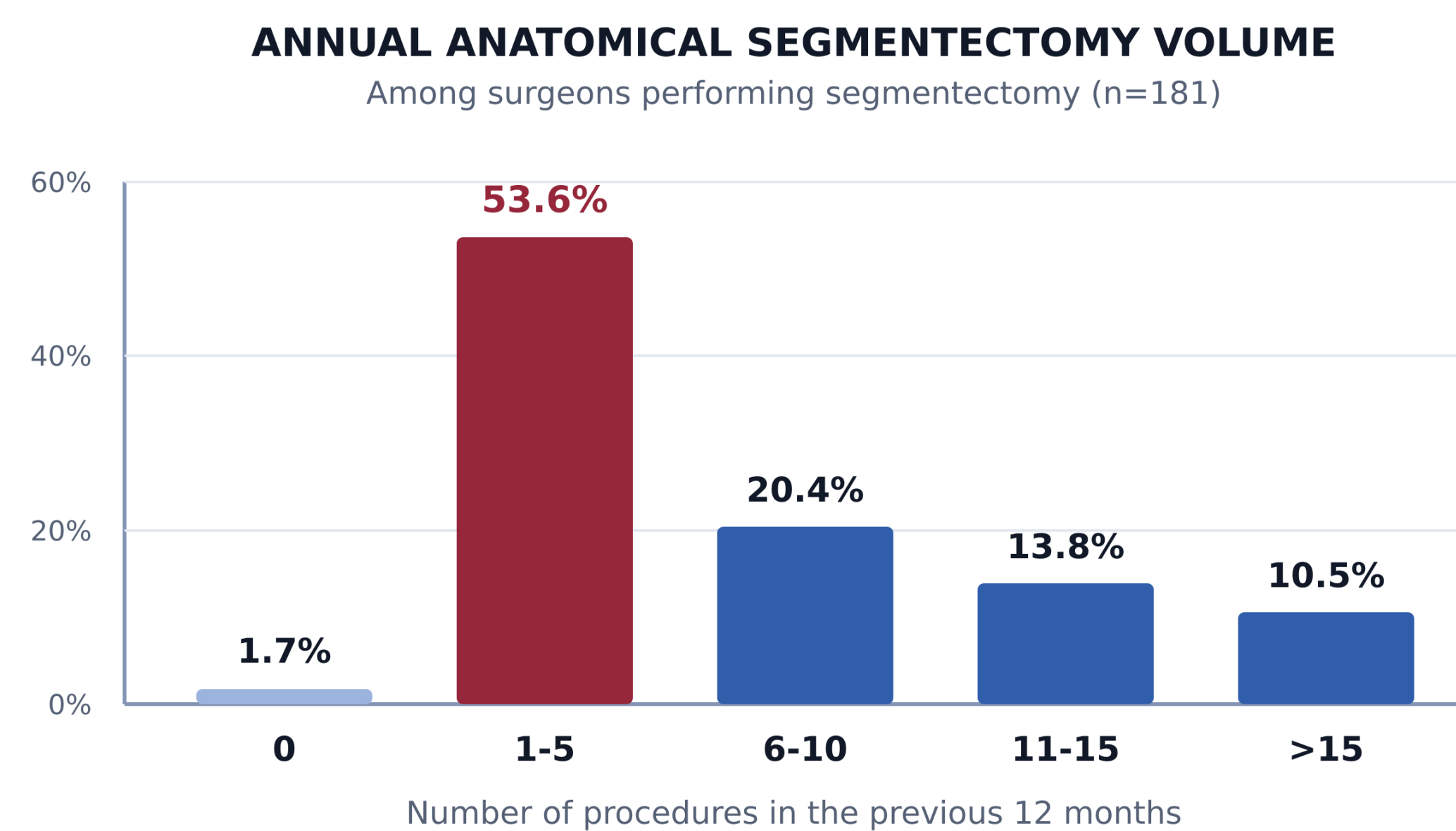
228
THORACIC SURGEONS

8
LATIN AMERICAN COUNTRIES

79.4%
PERFORM ANATOMICAL SEGMENTECTOMY

Valid responses to the adoption question: n=228

2 SURGICAL PRACTICE AND 3D PLANNING



74.2%
70-100% MINIMALLY INVASIVE
132/178 valid responses

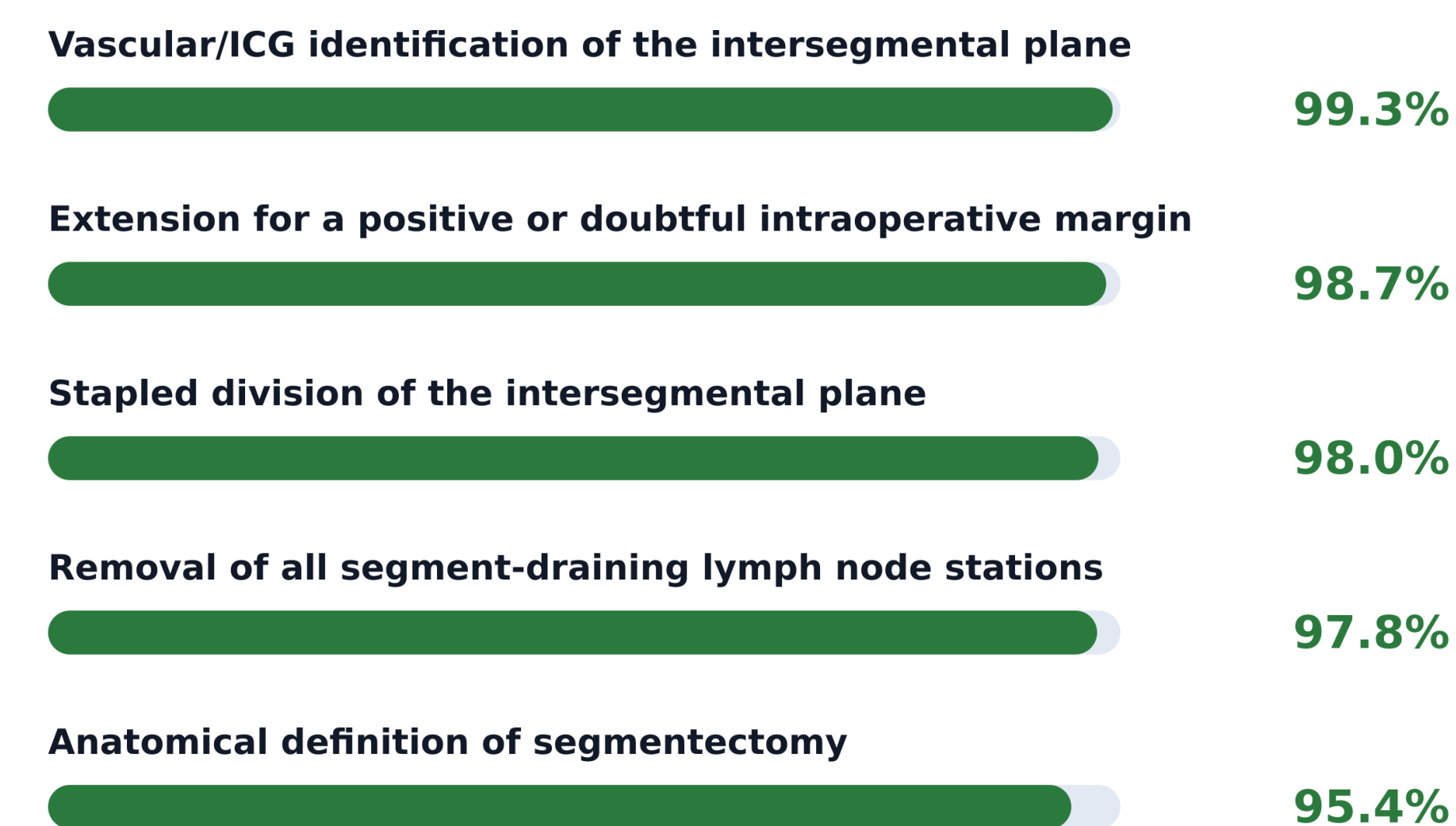
52.8%
USE PREOPERATIVE 3D PLANNING
75/142 valid responses

91.0%
OF NON-USERS CITED LACK OF ACCESS AS THE MAIN BARRIER TO 3D PLANNING
61/67 non-users with a valid response

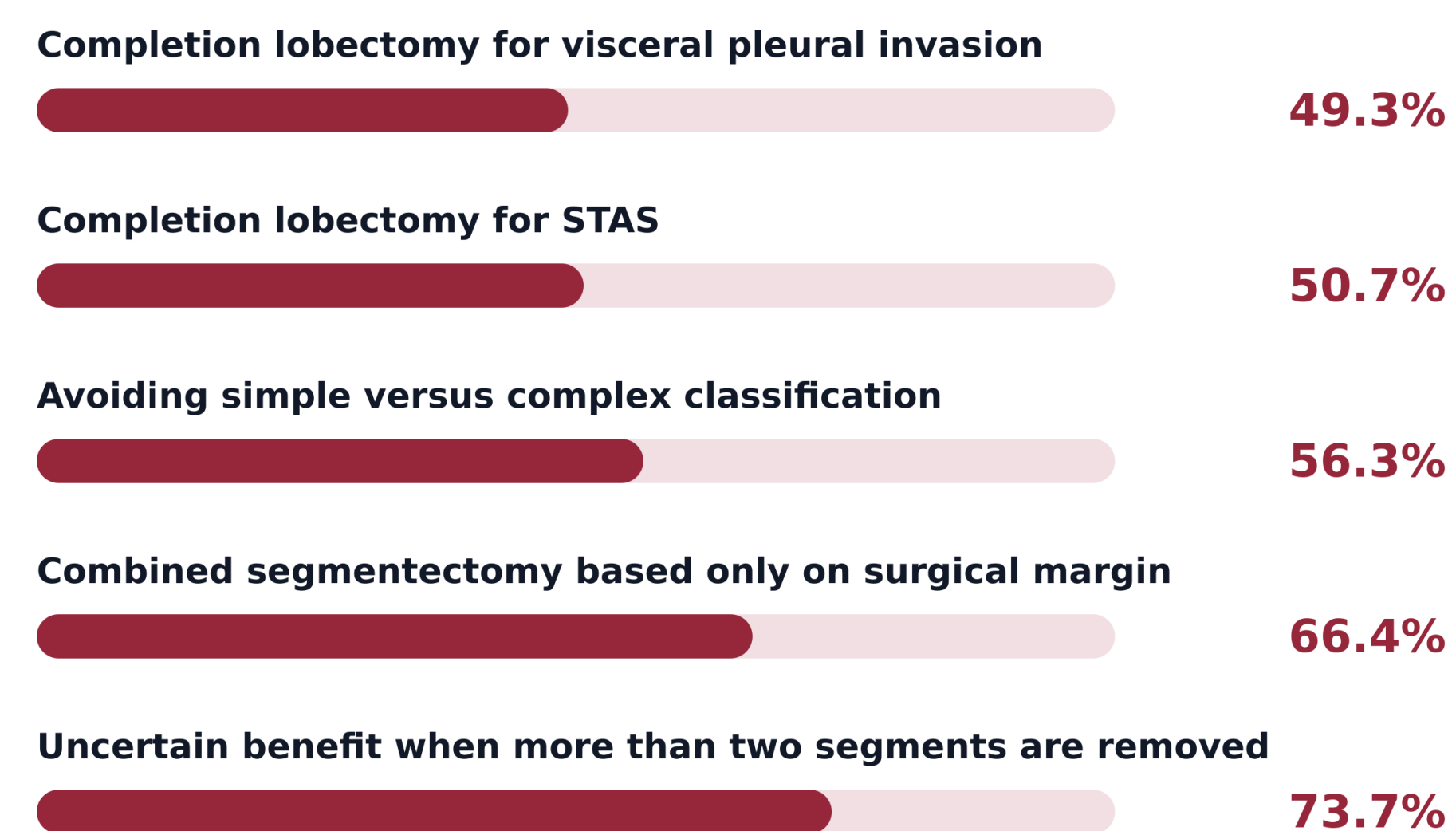
Percentages were calculated using item-specific valid-response denominators.

3 AREAS OF CONSENSUS AND DIVERGENCE

HIGHEST AGREEMENT



LOWEST AGREEMENT



AGREEMENT = TOTALLY AGREE + MOSTLY AGREE

Item-specific valid responses among surgeons performing segmentectomy (n=134-152)

Bars use a common 0-100% scale.

DISCUSSION AND CONCLUSION

Actionable Take Away Message

- Anatomical segmentectomy is widely adopted, but low surgical volume and limited access to 3D planning remain important barriers.
- High agreement on core operative principles contrasts with substantial heterogeneity in patient selection and postoperative oncological decisions.
- Insufficient technical confidence was the main reason for not performing anatomical segmentectomy.

Future Direction for Research

- Determine whether technical heterogeneity affects oncological outcomes.
- Develop regional consensus recommendations and standardized training pathways.

REFERENCES & ACKNOWLEDGEMENTS

References

- Saji H, et al. Segmentectomy versus lobectomy in small-sized peripheral non-small-cell lung cancer (JCOG0802/WJOG4607L). *Lancet*. 2022;399:1607-1617.
- Brunelli A, et al. European Society of Thoracic Surgeons expert consensus recommendations on technical standards of segmentectomy for primary lung cancer. *Eur J Cardiothorac Surg*. 2023;63:ezad224.

Artificial Intelligence (AI) Use Disclaimer

Generative AI (ChatGPT, OpenAI) was used for language editing and visual design support. All scientific content, data analysis, interpretation, and conclusions were reviewed and validated by the authors.