



Article  
scientifique

Commentaire

2017

Published  
version

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De Bari, Berardino; Durham Faivre, André-Dante; Bourhis, Jean; Ozsahin, Mahmut

### How to cite

DE BARI, Berardino et al. Can segmentectomy still be proposed as an alternative to lobectomy in 2016 ?  
In: Journal of clinical oncology, 2017, vol. 35, n° 5, p. 573–574. doi: 10.1200/JCO.2016.69.9140

This publication URL: <https://archive-ouverte.unige.ch/unige:181102>

Publication DOI: [10.1200/JCO.2016.69.9140](https://doi.org/10.1200/JCO.2016.69.9140)

## Can Segmentectomy Still Be Proposed As an Alternative to Lobectomy in 2016?

**TO THE EDITOR:** The recent article in *Journal of Clinical Oncology* by Dai et al<sup>1</sup> explored the outcomes of lobectomy and of more conservative surgical procedures for early-stage lung cancer (ESLC) in a large retrospective population obtained from the SEER registry. Results of the study, even with its limits correctly acknowledged by the authors, globally support the results available in the literature: lobectomy obtains better overall survival (OS) and cancer-specific survival compared with segmentectomy and/or wedge resections. These data confirm that lobectomy remains the standard surgical treatment for ESLC.

Despite that, some messages that are given to the scientific community through a highly diffused journal are not, in our opinion, acceptable in 2016. Indeed, the authors support in their discussion the adoption of more limited resections when lobectomy could not be proposed. In our opinion, looking at the data presented in this article, it is not ethical to propose treatments that expose patients to a significantly higher risk of death, given that stereotactic ablative radiotherapy (SABR) is largely available and obtains the same oncologic outcomes as lobectomy. SABR is already accepted as a curative alternative to surgery in the US guidelines for medically inoperable ESLC.<sup>2</sup>

Looking at operable patients, such as those considered in the study by Dai et al, the authors declared in their discussion that the adoption of SABR is not supported by high-level evidence. This statement does not take into account that a recent pooled analysis of two randomized controlled trials comparing SABR and lobectomy for operable ESLC showed that SABR is at least as effective as radical surgery in terms of OS and recurrence-free survival<sup>3</sup>: 3-year OS was 95% (95% CI, 85 to 100) in the SABR group and 79% (95% CI, 64 to 97) in the surgery group (hazard ratio, 0.14 [95% CI, 0.017 to 1.190];  $P = .037$ ). Three-year recurrence-free survival was 86% (95% CI, 74 to 100) in the SABR group versus 80% (95% CI, 65 to 97) in the surgery group (hazard ratio, 0.69 [95% CI, 0.21 to 2.29];

$P = .54$ ). These results are surely affected by the small sample sizes of the pooled studies, which were stopped as a result of the lack of accrual. However, it is a meta-analysis of randomized controlled trials; therefore, for the moment, it provides the highest level of evidence in this field, and it cannot be neglected. Moreover, similar results have previously been published in other larger meta-analyses of nonrandomized data.<sup>4,5</sup>

In conclusion, the merit of the study by Dai et al is that it confirms that surgical procedures other than lobectomy should be considered suboptimal in the modern era of thoracic oncology because of their significantly lower rates of OS and cancer-specific survival. However, we believe that it is time to consider SABR—and not more conservative surgical procedures—as the real alternative to lobectomy in ESLC, in the surgical community as well.

**Berardino De Bari, André Durham, Jean Bourhis, and Mahmut Ozsahin**

Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland

### AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

Disclosures provided by the authors are available with this article at [ascopubs.org/journal/jco](http://ascopubs.org/journal/jco).

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DOI: 10.1200/JCO.2016.69.9140; published at [ascopubs.org/journal/jco](http://ascopubs.org/journal/jco) on November 28, 2016.



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**Berardino De Bari**

No relationship to disclose

**André Durham**

**Employment:** Incyte (I), Novartis (I)

**Jean Bourhis**

No relationship to disclose

**Mahmut Ozsahin**

No relationship to disclose