Editorial

Do the right thing!

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Provenance: This is an invited Editorial commissioned by the Section Editor Shuangjiang Li (Department of Thoracic Surgery and West China Medical Center, West China Hospital, Sichuan University, Sichuan, China).

Comment on: Hino H, Karasaki T, Yoshida Y, *et al.* Risk factors for postoperative complications and long-term survival in lung cancer patients older than 80 years. Eur J Cardiothorac Surg 2018;53:980-6.

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The topic of the paper by Hino *et al.* (1) is crucial and it will become even more important in the future due to the increasing number of elderly patients in our surgical wards. The aim of authors was to retrospectively identify the risk factors for postoperative complications comparing two prognostic scores (Charlson Comorbidity Index and Glasgow Prognostic Score) and to assess long-term survival in a large multi-institutional cohort of patients aged 80 years or older. In the discussion they reported that the two prognostic scores were essentially equivalent to correlate comorbidities and preoperative factors with postoperative outcome; these results were not surprising and were consistent with previously published studies (2,3). The most interesting data coming from the analysis was the lower incidence of postoperative complications and perioperative mortality compared to previous series (35.3% *vs.* 48%) and (1.8% *vs.* 6.8%) (4). Furthermore, considering the oncologic results, the difference between previous studies and this one in terms of long-term survival, seems significative: 55.7% (only stage I) *vs.* 66.1% (overall) (5). The authors believe that it was due to two factors: selection of patients and choice of surgical strategy. These two points are crucial in any treatment planning, but they are even more important when facing frail patients. They reported that 40% of their patients had no comorbidities; that's impressive in a population so old!! The list included previous history of cancer, followed by diabetes and coronary artery disease. A careful preoperative work up (6,7) is mandatory not only to assess risk factors for postoperative complications, but also (and more important…) to identify patients no fit for surgery and shift them towards other less invasive treatments, as SBRT. The first thing to avoid perioperative mortality is a correct and thorough preoperative assessment.

Concerning the surgical strategy, video assisted thoracic surgery (VATS) was the preferred approach (more than 40%) and the extension of pulmonary resection ranged from partial resection to pneumonectomy, based on the clinical status of the patient. In fact, surgeons preferred limited resections in patients with multiple comorbidities or with high prognostic scores in order to minimize the risk of postoperative complications. However, if the thoracoscopic approach is not technically feasible, also a very limited thoracotomy should be considered (8).

Furthermore, in order to reduce the operation time in frailer patients (a prolonged anesthesia could have in elderly a negative impact on postoperative course, i.e., delirium and hallucinations) also a paradigm of lung cancer surgery as a complete lymph node dissection was "sacrificed", following previous studies showing that mediastinal lymphadenectomy had no impact in long-term survival in octogenarians (9). Other experiences reported that the previously well documented overall survival benefits of lobectomy over limited resections (wedges and segmentectomies) were not observed in patients older than 75 years and thus the latter should be considered as a viable option (10).

Keeping in mind these information, a careful thought on the therapeutic intent with this peculiar group of patients is mandatory. There are no doubts about the feasibility to

perform surgical procedures in octogenarians in healthy conditions or with a standard/moderate risk, achieving good results; however, we safety is crucial and we should tailor treatment considering, over the oncologic outcome, also life expectancy. Thus, and this is the second right thing, probably, in this setting the aphorism "less is more" should be strongly recommended, where less is related to invasiveness of the approach and extension of the resection.

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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