“Material” part of Material and Methods. Without these crucial details, it is hard to evaluate important aspects of Methods.

Back to Results. I now find the comparative incidence of pulmonary atelectasis and hypoxia. But then I encounter the subtitles PaO₂/FiO₂ Ratio, Cardiac Index, Mean Arterial Pressure, Postoperative Complications, and Grading Evidence Quality. Where do these belong in the story? I find some clues in the next to last paragraph of the Discussion: These relate to safety! In the introduction to the story, wouldn't a simple clause such as, “without hemodynamics deterioration” or some explicit clause about safety alert me to what was coming? Might the sign posts under Results have been “Efficacy” and then “Safety”? That would provide a coherent, linear story.

But what about “Grading Evidence Quality” tacked onto the end of Results? That is important, as are a number of other details essential for a high-quality meta-analysis. Placing them at the end of Results, however, disrupts the story. This is what “Supplemental Material” is for!

In sum, be it a complex meta-analysis, clinical trial, observational study, or translational science study—all with potentially many moving parts—readers are more likely to “get it” and appreciate it if they can seamlessly go from a brief Introduction to Methods to Results to Discussion to Clinical Implications to Conclusions with a story that fastidiously follows a logical roadmap laid out in the Introduction. A scientific paper may never be prose, like that of Boyle and Pollack, but our papers can be a little more readable, logically ordered, and follow the themes if we think about storytelling.

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Commentary: Lung recruitment: Why is this not on my radar?

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Perioperative management topics cycle in morbidity and mortality rounds with a degree of regularity. As surgeons, we generally focus on those issues that we can control, as well as those for which we have an understanding of the physiology. Nonetheless, some topics fall through the cracks, never seeing the light of day and not being considered priorities.

In this article of the *Journal*, Hu and colleagues¹ present a meta-analysis reviewing lung recruitment, admirably attempting to cobble together a series of articles peppered with heterogeneity and ultimately highlighting the potential importance of this topic to all of us. This is a thoughtful

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CENTRAL MESSAGE

If we have the patience and the wherewithal, we can identify the simplest interventions we take for granted that can improve our patients' lives.

academic achievement, as there were several leaps of faith to amalgamate these papers into a coherent message. The question of lung recruitment is hampered by a lack of consensus on many issues. Clearly, the hypothesis supporting the positive benefits of this strategy has a vague

definition, as there were so many variables in terms of how recruitment is achieved (eg, degree of pressure) and when the intervention is applied (intra vs post vs both). The literature is fraught with prejudice, with 8 of the 20 articles characterized as having a moderate or high degree of bias. There was also a wide variability, reflecting the lack of consensus as to what should be measured as an outcome of this sort of intervention. Of the 20 articles chosen, 6 measured hypoxic events, 12 measured PaO₂/FiO₂, and only 7 measured atelectasis (for what that's worth as a surrogate marker).

So why is this not on my radar? Although some form of lung recruitment works, I am bothered by the fact that I do not know what intervention I should do, when I should do it, and how I should measure it. It is also distant to my radar spectrum, as this intervention falls through the cracks of who takes responsibility for the outcome, possibly due to discontinuity between who intervenes and who sees the consequences. When we as surgeons intervene with a new valve, we take care to evaluate the impact on follow-up, but is there consistency between the

anesthetist that intervenes with lung recruitment and the immediate perioperative outcomes seen by an intensivist? This is a good example of an intervention that spans borders of responsibility and for which the system is perhaps not designed to pick up benefits as readily. Finally, it is not on my radar as this is a simple intervention that does not involve a gadget or some technique that reflects our surgical prowess.

This was a tough topic to cover, owing to the heterogeneity of the previously reported studies, and the authors deserve recognition for bringing it to light. They have highlighted that this is a cheap, simple intervention, and one can envision that a large trial could be designed to limit bias. Now that we see the potential to improve immediate pulmonary function, is the appetite there to go to the next step and see if this is associated with improved outcomes with robust relevant clinical measures?

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Commentary: We need a research agenda

Andrea Montisci, MD,^{a,b} Mattia Glauber, MD,^c and Antonio Miceli, MD, PhD^c

Postoperative pulmonary complications (PPCs) in cardiac surgery have a significant impact on patients' prognosis, and respiratory failure represents one of the most common causes of intensive care unit readmission for cardiac surgical patients.¹ Plenty of risk factors, such as the

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CENTRAL MESSAGE

Pulmonary recruitment may improve pulmonary outcomes; however, there is a need for uniformity of outcome definitions and maneuver treatments.

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underlying disease, prolonged general anesthesia, median sternotomy, direct lung surgical trauma, extracorporeal circulation, and blood transfusions, may induce pulmonary damage after cardiac surgery. Therefore, strategies aimed at reducing the burden of PPCs represent an important area of