Acute Postoperative Pain Trajectory Groups: Comment

To the Editor:

In a laudable effort, Vasilopoulos *et al.*[1] studied the early postoperative pain trajectories from a mixed surgical population with the aim to improve prediction of pain responses, thereby serving as a basis for a future personalized analgesic approach to optimize recovery. The study included a detailed preoperative assessment of relevant patient characteristics and intraoperative use of anesthetic and analgesic interventions subsequently analyzed with relevant multiple statistical methods.

As presented, this is one of the few studies to cover this important topic, but it is surprising that despite the detailed *pre-* and *intra*operative data, there is no detailed information about *post*operative pain treatment for the primary 0 to 7 days *post*operative pain outcome. Neither does it seem to be included in the analysis of the postoperative pain trajectory.

Consequently, because of the lack of detailed information on postoperative pain treatment (which unfortunately was only presented in general terms in Appendix 1), it may be difficult to interpret this otherwise important study. Thus, a better and more helpful design would be the same methodology but assessed in fewer procedure-specific populations and then with exact information on postoperative pain management for the period in question, to allow sufficient analysis of interactions between pre-, intra- and postoperative characteristics and the effects of different postoperative pain interventions. As usual, important studies always raise questions on improvement strategies for future studies.

Competing Interests

The authors declare no competing interests.

Henrik Kehlet, M.D., Ph.D., Nicolai Bang Foss, M.D., Ph.D. Rigshospitalet, Copenhagen, Denmark (H.K.). henrik.kehlet@regionh.dk

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In Reply:

We sincerely thank Drs. Kehlet and Foss[1] for their commentary on our study[2] of the determinants of postoperative pain trajectories. The authors correctly highlight that, although we were able to provide a detailed analysis of pre- and intraoperative characteristics, our study did not robustly characterize postoperative pain management and its relation to postoperative pain trajectories. In the analysis we were able to perform and present, we provided support for a relationship between postoperative opioid requirement and postoperative pain trajectory (Kruskal-Wallis $H = 54.8$, $df = 4$, $P < 0.001$), with patients in the higher pain trajectories requiring greater postoperative opioids (fig. 1, with numbers from Table 3 in the original article[2]). However, as the authors note, with our heterogenous patient sample, there was similar heterogeneity in postoperative pain management, limiting our analysis. We agree with the authors that studies with more homogenous patient populations regarding procedure type would be better able to characterize perioperative pain management and how it is related to postoperative pain trajectories. We are excited that we were able to contribute to this important clinical topic.

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Competing Interests

The authors declare no competing interests.

Terrie Vasilopoulos, Ph.D., Patrick J. Tighe, M.D., M.S. University of Florida College of Medicine, Gainesville, Florida (T.V.). tvasilopoulos@anest.ufl.edu

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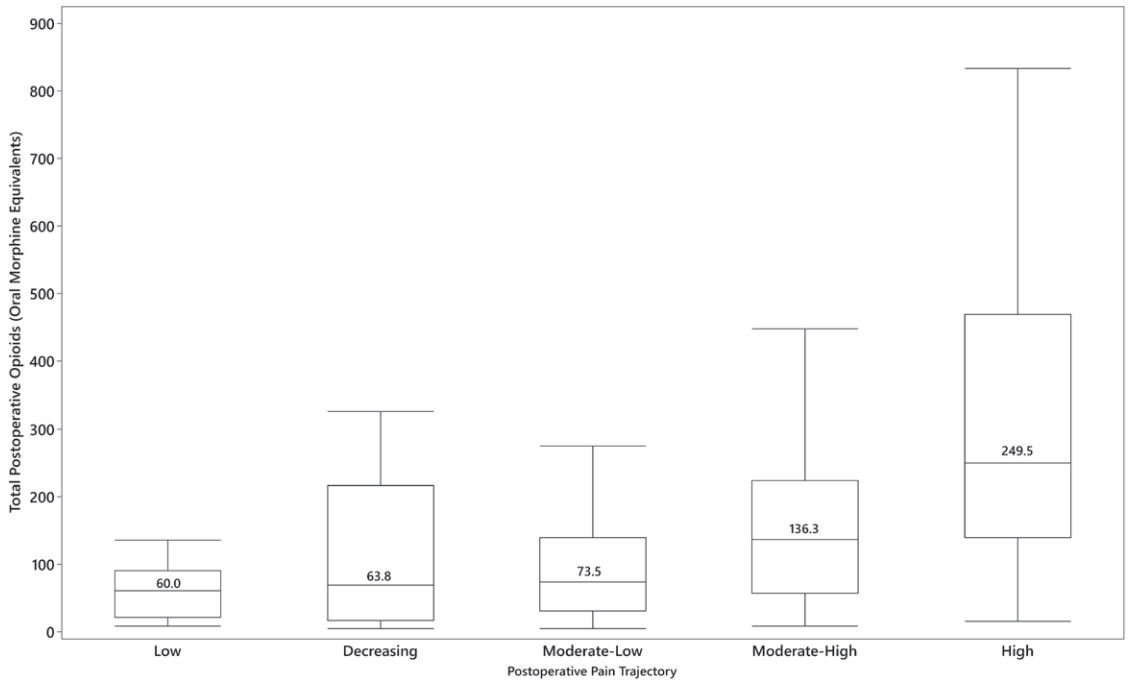

Fig. 1. Box plot of total postoperative opioids stratified by postoperative pain trajectory group. *Labels* indicate median values.

2. Vasilopoulos T, Wardhan R, Rashidi P, Fillingim RB, Wallace MR, Crispen PL, Parvataneni HK, Prieto HA, Machuca TN, Hughes SJ, Murad GJA, Tighe PJ; Temporal Postoperative Pain Signatures (TEMPOS) Group: Patient and procedural determinants of postoperative pain trajectories. Anesthesiology 2021; 134:421–34

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A Crack in the Wall, or How Artificial Intelligence Would Classify Pink Floyd?

To the Editor:

We were interested to see that our recent editorial entitled "A Crack at MAC,"[1] was classified as relating to crack cocaine. In particular, the editorial was indexed on the Anesthesiology website (https://pubs.asahq.org/anesthesiology/article/134/6/835/115687/A-Crack-at-MAC) with the topics "crack cocaine" and "minimum alveolar concentration" (fig. 1). We feel obliged to make a disclaimer: Potential readers with an interest in addiction medicine will be disappointed. We presume that the classification links are generated by some sort of artificial intelligence classification process. This misclassification demonstrates the profound limitations of the semantic depth of artificial intelligence processes. These processes can link patterns nicely, but, underneath all the frothy hubris, artificial intelligence is a zombie that would see nothing wrong with classifying the iconic Pink Floyd song ("Another Brick in the Wall") as a masonry manual. By chance, a survey on Artificial Intelligence in Anesthesiology has just been initiated ("2021 Survey on Artificial Intelligence in Anesthesiology," Carlos Estrada Alamo, M.D., M.B.A., Penn Medicine, University of Pennsylvania Health System, Philadelphia, Pennsylvania). Could you trust a machine that can't even understand that the word "crack" has at least 11 different meanings, and might even be a verb?

Competing Interests

The authors declare no competing interests.

Misha Perouansky, M.D., Jamie W. Sleigh, M.D. University of Wisconsin–Madison, Madison, Wisconsin (M.P.). mperouansky@wisc.edu

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