Continuous Infusion of Intraperitoneal Bupivacaine After Laparoscopic Surgery: A Randomized Controlled Trial—What About Statistical Power and Analysis?

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Dear Editor,

We read with interest the letter written by La Colla and colleagues and appreciate their comments. We agree that sample size calculations are integral to evaluating the results of studies that contain non-significant results [1, 2]. Yet, where statistical significance is found, such as for the visual analog scale in our paper, the null hypothesis has already been rejected, and thus, a calculation of sample size is superfluous.

Furthermore, we are surprised that La Colla and colleagues assume that all biostatisticians believe in the importance of post hoc power calculations. This is a matter of debate, with many disagreeing about the usefulness and importance of post hoc power calculations [3, 4].

We therefore maintain that our conclusions regarding the positive effects of continuous infusion intraperitoneal

bupivacaine on post-bariatric subjective pain scores remain valid.

References

1. Freiman JA, Chalmers TC, Smith H, et al. The importance of beta, the Type II error and sample size in the design and interpretation of the randomized controlled trial. *N Engl J Med.* 1978;299:690–694.
2. Dimick JB, Diener-West M, Lipsett PA. Negative results of randomized clinical trials published in the surgical literature: equivalency or error? *Arch Surg.* 2001;136(7):796–800.
3. Walters SJ (2008) Consultant's forum: should post hoc sample size calculations be done? *Pharmaceut Stat.* doi:10.1002/pst.334
4. Fogel J. Post hoc power analysis—another view. *Pharmacotherapy.* 2001;21(9):1150.

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