In Response

To the Editor:

We thank Dr X. Cai and colleagues for their interest in our work and knowledgeable comments on our study (1). In this regard, we wish to clarify a few points of our study.

The first comment of the authors regarding the use of fixed doses of the studied drugs has already been addressed in the limitations of our study. Our conclusions are referring to these doses and we stated that "we cannot exclude that different doses might be more beneficial". We designed our study to achieve a statistical power of 0.80 as described in the statistical analysis. The studies investigating different doses of these drugs (2-11), apart from the study of Bryson et al (6), are referring to different type of surgeries and settings. It is not surprising -as the authors of the letter to editor have also noted- that the findings of the above studies are not consistent. This is expected not only due to the different doses/infusion rates and types of surgery/pain mechanisms, but also as the methodology and study design varied among those studies. Therefore, we believe that the mini meta-analysis of these data would not give a result that can be easily generalised to all surgical populations.

Regarding the second comment of the authors that we excluded patients with known central nervous system or psychiatric disease, but we failed to provide the baseline of pain and cognitive function of the cohort, we believe that this has also been addressed. In our study we included only ASA I and ASA II patients and we had several exclusion criteria in order to minimize the impact of any factors that would influence postoperative pain or analgesic consumption and thus to minimize possible bias. Specifically, patients with chronic use of opioids or other analgesics were excluded from the study. Additionally, patients with communication difficulties or inability to comprehend and cooperate were also excluded. Therefore, patients suffering from chronic pain or patients with cognitive dysfunction were actually excluded from the study, according to the abovementioned exclusion criteria.

Regarding the need for further research, we agree; in the conclusion of our paper, we recommended that further studies should be conducted to assess the safety and efficacy of different doses and possibly a combination of the two drugs. Additionally, we suggest that studies assessing other parameters such as cognitive function at baseline and including patients with preoperative pain would be helpful.

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References

1. Rekatsina M, Theodosopoulou P, Staikou C. Effects of intravenous dexmedetomidine versus lidocaine on postoperative pain, analgesic consumption and functional recovery after abdominal gynecological surgery: A randomized placebo-controlled double blind study. *Pain Physician* 2021; 24:E997-E1006.
2. Bojaraaj K, Senthilkumar S, Vijayaragavan S, Gnanavelrajan A. Effect of intravenous use of dexmedetomidine on anesthetic requirements in patients undergoing elective spine surgery: A double blinded randomized controlled trail. *Int J Sci Study* 2016; 4:251-255.
3. Naik BI, Nemergut EC, Kazemi A, et al. The effect of dexmedetomidine on postoperative opioid consumption and pain after major spine surgery. *Anesth Analg* 2016; 122:1646-1653.
4. Ozkose Z, Demir FS, Pampal K, Yardim S. Hemodynamic and anesthetic advantages of dexmedetomidine, an alpha 2-agonist, for surgery in prone position. *Tohoku J Exp Med* 2006; 210:153-160.
5. Tufanogullari B, White PF, Peixoto MP, et al. Dexmedetomidine infusion during

laparoscopic bariatric surgery: The effect on recovery outcome variables. *Anesth Analg* 2008; 106:1741-1748.

6. Bryson GL, Charapov I, Krolczyk G, Taljaard M, Reid D. Intravenous lidocaine does not reduce length of hospital stay following abdominal hysterectomy. *Can J Anaesth* 2010; 57:759-766.
7. Saadawy IM, Kaki AM, Abd El Latif AA, Abd-Elmaksoud AM, Tolba OM. Lidocaine vs. magnesium: Effect on analgesia after a laparoscopic cholecystectomy. *Acta Anaesthesiol Scand* 2010; 54:549-556.
8. Farag E, Ghobrial M, Sessler DI, et al. Effect of perioperative intravenous lidocaine administration on pain, opioid consumption, and quality of life after complex spine surgery. *Anesthesiology* 2013; 119:932-940.
9. McKay A, Gottschalk A, Ploppa A, Durieux ME, Groves DS. Systemic lidocaine decreased the perioperative opioid analgesic requirements but failed to reduce discharge time after ambulatory surgery. Anesth Analg 2009; 109:1805-1808.
10. Dewinter GBE, Teunkens A, Vermeulen K, Al Tmimi L, Van de Velde M, Rex S. Systemic lidocaine fails to improve postoperative pain, but reduces time to discharge readiness in patients undergoing laparoscopic sterilization in day-case surgery: A double-blind, randomized, placebo-controlled trial. *Reg Anesth Pain Med* 2016; 41:362-367.
11. Wuethrich PY, Romero J, Burkhard FC, Curatolo M. No benefit from perioperative intravenous lidocaine in laparoscopic renal surgery: A randomised, placebo-controlled study. *Eur J Anaesthesiol* 2012; 29:537-543.