



# Response to the Letter to the Editor Regarding Our Research Article on “Effect of Different Doses of Sugammadex on Recovery and Hemodynamic Parameters in Reversing Neuromuscular Blockade in Patients Undergoing Electroconvulsive Therapy”

*“Elektrokonvülsif Tedavi Uygulanan Hastalarda Nöromusküler Blokajın Geri Döndürülmesinde Sugammadexin Farklı Dozlarının Derlenme ve Hemodinamik Parametrelere Etkisi” Konulu Araştırma Makalemize İlişkin Editöre Mektuba Yanıt*

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**Ahahtar kelimeler:** Elektrokonvülsif tedavi, nöromusküler bloker ajanlar, rokuronyum, sugammadeks, anestezi derlenmesi

## Dear Editor,

We want to thank our readers for their interest in our research article on the recovery and hemodynamic parameters of different sugammadex doses (2 mg/kg and 3 mg/kg) in patients undergoing electroconvulsive therapy (ECT)<sup>1</sup>. The answers to the questions asked about our article are provided below.

First, sugammadex has made a breakthrough in the rapid and safe reversal of neuromuscular blockade. However, it is more costly than cholinesterase inhibitors used to reverse neuromuscular blockade. The effects of high doses of sugammadex, such as 8 mg/kg and 16 mg/kg, on recovery in ECT procedures have been

investigated in the literature<sup>2,3</sup>. In our study, both 2 mg/kg and 3 mg/kg doses were effective and safe. In addition, it was determined that the 3 mg/kg dose provided faster recovery compared to the 2 mg/kg dose. As you stated, determining cost-effectiveness requires various evaluations, including drug cost, total hospital stay, and complications, but this is not the purpose of our study. No significant complications were observed in the patients included in the study other than hemodynamic changes that could be resolved with short-term interventions. In conclusion, as demonstrated in our study, low sugammadex doses are low-cost and safe in the recovery from anesthesia, however, comprehensive studies are needed regarding cost-effectiveness.

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Secondly, we observed that approximately one in three patients in our study had bipolar disorder, one in three had major depression and depressive disorders, and one in three had psychosis, schizophrenia, and schizoaffective disorders. As you rightly pointed out, the recovery may vary depending on the diagnosis, and the drugs used in treatment. In our hospital practice, we did not find significant differences in recovery among patients with different diagnoses when using low-dose propofol-rocuronium for induction and 2-3 mg/kg sugammadex for reversal. However, we agree that further studies are necessary to fully understand this complex relationship.

We appreciate your interest in our research.

### **Ethics**

### **Author Contributions**

Concept: K.A., A.S.S., Design: K.A., A.S.S., Literature Search: K.A., A.S.S., Writing: K.A.

**Conflict of Interest:** The authors have no conflict of interest to declare.

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