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REPLY

We thank Dr Orser for her comments regarding the effect of physostigmine on propofol anaesthesia.[1] However, this is a clinical study conducted in humans and, as such, is far from interpreting the effects of propofol on the $GABA_A$ receptor.

In the discussion we tried to bridge the knowledge in the laboratory setting, which is often complicated but valuable and extremely useful, with the results of a clinical study.[1] We agree that propofol enhances the $GABA_A$ receptor function and relevant references are included.[2,3] With regard to the report that "the effect of propofol on the $GABA_A$ receptor may not be related to the loss of consciousness,"[4] we simply included in the references one laboratory report which may not fit with previous laboratory data. By this we neither try to interpret nor to extrapolate these results to humans. As Dr. Orser points out, the experimental procedure may influence the results. Our study did not attempt nor could resolve a conflict among laboratory data. However, we apologize for ignoring and therefore omitting to include in this discussion the interesting paper by Orser et al.[5]

Laboratory investigations are often based on models and one cannot expect from a model more than a model can give. Also, the clinical data do not always confirm or reproduce the results obtained in the laboratory. For these and many other reasons research becomes attractive and fascinating. Dr Orser, in her letter, is absolutely right that clinical concentrations of anaesthetics influence different types of receptors. We have long way to go.

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A. Fassoulaki
C. Sarantopoulos
Ch. Derverniotis
Athens, Greece