



## Response to letter to the editor concerning “Orthopaedic surgery patients who use recreational marijuana have less pre-operative pain”

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Dear Editor,

We appreciate the comments by Dr. Mai [1] regarding our article titled *Orthopaedic Surgery Patients Who Use Recreational Marijuana Have Less Pre-Operative Pain* [2]. Indeed, we are currently working on a follow-up study that should help answer many of these very important questions. Our current study was an analytical cross-sectional analysis of pre-operative patient-reported data, so we did not evaluate post-operative pain or any other post-operative data. Similarly, the use of intra-operative or post-operative nerve blocks was outside the scope of our study design. We did adjust for the type of surgery by including the operative joint and primary procedure in the multivariable regression analysis. Lastly, we analysed both pre-operative opioid use and marijuana use as binary categorical variables: “YES-opioid-use” or “NO-opioid-use”, and “YES-non prescription drug use - marijuana” or “NO-prescription drug use – marijuana”. We have found that pre-operative opioid use is an important factor in this patient population [3], and we controlled for this in our multivariable analysis. Accurate quantification of pre-operative opioid use is very difficult in orthopaedic patients as many prescriptions are provided prior to evaluation by the orthopaedic surgeon. However, we agree that the amount of opioid use and the amount of marijuana use may be important and related.

Given the current trends of increased marijuana use (medically prescribed or recreational), the relationships identified

in our study are very relevant to not only orthopaedic practice, but also the medical community at large. We thank Dr. Mai again for the comments and look forward to further investigation regarding the factors associated with pain modulation in the peri-operative setting.

### Compliance with ethical standards

**Conflict of interest** Dr. Henn reports research support from Arthrex, Inc., outside the submitted work.

All other named authors declare that they have no conflict of interest.

### References

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