



## Answer to the Letter to the Editor of V. Kumar et al. concerning "Laminectomy alone versus laminectomy with fusion for degenerative cervical myelopathy: a long-term study of a national cohort" by E. de Dios et al. (Eur Spine J [2022];31(2):334–345)

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Many thanks for showing interest and appreciation of our article. Below are our attempts to answer your queries.

1. The reasons for such a distribution of the cohort are register-based and illustrate a difference in the prevalence of spondylolisthesis and kyphosis between the treatment groups, indicating that there is a selection bias by the operating surgeon towards choosing instrumented fusions in the more deformed cervical spines. The patients were not randomized; however, in order to decrease this selection bias, we used propensity score matching to compare patients with similar demographic and radiographic baseline characteristics. Previous research has used this methodology to compare anterior and posterior surgery for degenerative cervical myelopathy [1].
2. The number of operated levels for each patient was obtained from the Swedish Spine Register. We also assessed the number of compressed levels on preoperative T2-weighted midsagittal images with blinded reviewers and found that although the number of operated levels differed with on average one more level in the fusion group, the average of radiographically assessed

compressed levels was the same between the groups. We interpret this difference in the fusion group between compressed levels and operated levels as the result of the instrumentation including one more level with screw fixation.

**Conflict of interest** We have no sources of support or conflicts of interest to disclose.

### Reference

1. Kato S, Nouri A, Wu D, Nori S, Tetreault L, Fehlings MG (2017) Comparison of anterior and posterior surgery for degenerative cervical myelopathy: an MRI-based propensity-score-matched analysis using data from the prospective multicenter AOSpine CSM North America and international studies. *J Bone Joint Surg Am* 99(12):1013–1021

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