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Misconceptions, Misuses, and Misinterpretations of P Values and Significance Testing

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Article Should Be Read and Widely Referenced

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I thoroughly enjoyed the excellent article by Gagnier and Morgenstern in the current JBJS on the misuse

of the p-value and the concept of statistical significance in general. I review articles for JBJS and several

other journals, and for many years I have been critical of the errors that this article discusses.

Unfortunately, this generally amounts to trying to teach statistical significance in the context of a review,

which is very time consuming and frustrating.

From now on, I will simply refer the authors to this article and request that they follow these guidelines.

This will be helpful to me, the editors, and the authors.

I also make reference to an Instructional Course Lecture (ICL) that my colleagues and I wrote in 1994 (1),

which makes many of the same points as this article, albeit less eloquently. Unfortunately, the ICLs have a

limited readership, and to my knowledge, our chapter has been cited only once in the literature. I'm certain

that the Gagnier and Morgenstern article will be widely referenced.

References

1. Ebramzadeh E, McKellop H, Dorey F, Sarmiento A. Challenging the validity of conclusions based on P-values alone: a critique of

contemporary clinical research design and methods. Instr Course Lect. 1994;43:587-600.

Conflict of Interest: None Declared