the 2-year follow up, the abstract suggests 74 patients, whereas the CONSORT flow chart and the text in the result section indicate that 75 patients were available.

We would like to conclude here by complimenting the author for presenting an essential research question. However, the readers of the article must be sensitized regarding the shortcomings of the study. Future studies in this topic should consider the point suggested in this letter to avoid any methodologic and reporting inaccuracies.

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References

1. Yamakado K. A prospective randomized trial comparing suture bridge and medially based single-row rotator cuff repair in medium-sized supraspinatus tears. *Arthroscopy* 2019;35:2803-2813.
2. Akobeng AK. Understanding randomised controlled trials. *Arch Dis Child* 2005;90:840-844.
3. Carbonel I, Martinez AA, Calvo A, Ripalda J, Herrera A. Single-row versus double-row arthroscopic repair in the treatment of rotator cuff tears: A prospective randomized clinical study. *Int Orthop* 2012;36:1877-1883.
4. Kahan BC, Rehal S, Cro S. Risk of selection bias in randomised trials. *Trials* 2015;16:405.
5. Roth KM, Warth RJ, Lee JT, Millett PJ, ElAttrache NS. Arthroscopic single-row versus double-row repair for full-thickness posterosuperior rotator cuff tears: A critical analysis review. *JBJS Rev* 2014;2:01874474:201402070-00007.
6. Burgess DC, Gebski VJ, Keech AC. Baseline data in clinical trials. *Med J Aust* 2003;179:105-107.

Author Reply to "Regarding 'A Prospective Randomized Trial Comparing Suture Bridge and Medially Based Single-Row Rotator Cuff Repair in Medium-Sized Supraspinatus Tears'"

I would like to thank Datt, Jain, Morankar, and Digge for their interest in our article "A Prospective Randomized Trial Comparing Suture Bridge and Medially Based Single-Row Rotator Cuff Repair in Medium-Sized Supraspinatus Tears,"[1] and I wish to address their concerns.

First, regarding the concept of sample size calculation in a prospective randomized trial, one must distinguish a priori sample size calculation and the post-hoc power analysis. Estimation of sample size should be done before the data collection starts, which I conducted using our pilot data. On the other hand, *post hoc* sample size computation is not encouraged conventionally.[2] Regarding the study power, they cited a prospective randomized trial by Carbonel et al., recruiting 183 patients.[3] This study represents a massive effort and is laudable; however, the sample size calculation was not shown in the article. To answer a research question, a large sample size may detect the small difference between the treatment groups, but too large a sample is resource-intensive and may be unethical; thus, many randomized trials utilize small pilot study, personal experience, or expert opinions.

Second, Datt et al. criticized our randomization method, stating that "the author obtained an equal sample size in both the groups, which indicates that they must have implemented some kind of randomization blocking"; however, it is a misjudged assumption. Randomization was performed at the end of preparation: the procedure used for each patient was chosen by opening a sealed, randomly assigned envelope that indicated the suture-bridge or medially-based single-row technique and prepared the same number for each treatment arms ahead of time. A randomized trial is an essential tool for comparing the efficacy of treatment modalities.[4] With proper randomization, the validity of data analysis is ensured. Simple randomization can result in the imbalanced assignment of treatment groups because randomly assigned groups of smaller numbers of patients are more likely to result in different numbers of a patient in each group. The method used in our study is

a modification of simple randomization but could be regarded as a variation of block randomization.

Finally, I really appreciated their comments regarding the number of recruited patients. The CONSORT flow is correct.

Thank you once again for your kind interest in the article. We hope this letter can help clarify the statistical part of the method and may clear up the misunderstandings.

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References

1. Yamakado K. A prospective randomized trial comparing suture bridge and medially based single-row rotator cuff repair in medium-sized supraspinatus tears. *Arthroscopy* 2019;35:2803-2813.
2. Das S, Mitra K, Mandal M. Sample size calculation: Basic principles. *Indian J Anaesth* 2016;60:652-656.
3. Carbonel I, Martinez AA, Calvo A, Ripalda J, Herrera A. Single-row versus double-row arthroscopic repair in the treatment of rotator cuff tears: a prospective randomized clinical study. *Int Orthop* 2012;36:1877-1883.
4. Randelli P, Arrigoni P, Lubowitz JH, Cabitza P, Denti M. Randomization procedures in orthopaedic trials. *Arthroscopy* 2008;24:834-838.

Regarding "Analyzing Spin in Abstracts of Orthopaedic Randomized Controlled Trials With Statistically Insignificant Primary Endpoints"

We read with much enthusiasm the paper by Arthur et al.[1] and the editorial commentary by R.G. Marx.[2] Arthur et al.[1] analyzed the prevalence of a subtle and common, albeit lesser, highlighted form of reporting bias: spin in the orthopaedic literature. Although the paper does not discuss in depth the grades or classification of spin or describe comprehensive methods of preventing spin as did Boutron et al.,[3] who were the first to analyze spin in the orthopaedic literature, the paper presents commendable findings that caution readers, editors, and reviewers of the top orthopaedic journals.

As avid readers of *Arthroscopy* and other top journals in orthopaedics, as analyzed by Arthur et al.,[1] we wish to opine on the points of the editorial comments that we believe will set up healthy discussions in the future in this less-explored area of reporting bias.

1. Spin is a type of reporting bias. As the term "reporting bias" implies, appropriate measures should be taken at the time of reporting of the trial to prevent or avoid them. Most readers may have access only to the abstracts. By reading the methodology of abstracts, one can get only an overall idea about the methodology used in the trial, and cannot understand nuances hidden in the methodology. Thus, discovering spin is a difficult task unless one is enlightened enough on this aspect. Suggesting reading the methodology section more thoroughly as the best way around this reporting bias is like accepting spin as a part of the reporting process. We believe efforts should be taken to remove the bias rather than accepting them and burdening the reader. This can be done, for example, by training journal reviewers to identify spin and by restructuring abstracts as suggested by Boutron et al.[3]
2. In 2018-2019 alone, reputed journals have published many articles highlighting the presence of spin in their fields of medicine.[4,5] The analysts of spin such as Arthur et al.,[1] in addition to their vast experience in their respective fields, have taken preresearch training to specifically differentiate spin. If they are at fault for misinterpreting the findings as spin, we believe that a large group of readers who happen to be clinicians are much more vulnerable to spin. The responsibility falls on the shoulders of authors and journals to convey research findings most understandably for the reader.
3. Randomized controlled trials are predesigned and registered to avoid reporting bias. On the completion of the study, authors should objectively report the outcomes irrespective of their significance. Neglecting a primary outcome because it is not significant and highlighting a secondary outcome because it has significant association introduces spin and misrepresents the intention of the trial in the first place.