

## Comment on Hu et al.: Allograft versus autograft for anterior cruciate ligament reconstruction: an up-to-date meta-analysis of prospective studies

Qiang Wang · Chuan-zhi Xiong

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Dear Editor,

We have read the article titled “Allograft versus autograft for anterior cruciate ligament reconstruction: an up-to-date meta-analysis of prospective studies” by Hu et al. [1] with great interest.

In this meta-analysis, the authors compared clinical efficacy of allograft with autograft for anterior cruciate ligament reconstruction. They concluded that few significant differences are identified between the two methods. However, we have several queries which we would like to communicate with the authors.

1. The authors used a random effect model to pool the data in all the forest plots even if the *P* value of the heterogeneity was greater than 0.05 or 0.10. As we know, different effect models may result in different results. Therefore, we would like to know the reason that the authors chose the random effect model for all analyses.
2. With respect to the assessment of study quality, two investigators independently evaluated the quality of each study. However, we would like to know how to solve the problems if there are discrepancies between the two authors. Besides, the authors used the Detsky scale and the Newcastle-Ottawa scale to assess the quality of randomised controlled trials and prospective cohort studies, respectively. However, there were no detailed scores for each trial.
3. The sensitivity analysis was conducted by omitting one eligible study each time. They emphasised the role that each eligible study played. However, we consider that

they may neglect the influence of all prospective cohort studies (PCS). We suggest that sensitivity analysis should also be performed by excluding all PCS.

4. The authors reported many outcome measures regarding the functional recovery, and we would like to know whether the outcome measures were recorded at the same follow-up time.
5. In the data analysis part, the authors indicated that if standard deviations were unavailable, they used the data of mean standard deviation from the trials that reported this statistic; we consider this to be inappropriate. As we know, some of the outcome measures, especially for functional assessment scales, are mostly subjective. Therefore, we advise that in this condition, it is better not to recruit this study for meta-analysis.

We agree with the authors that age and activity level may affect the conclusions. Therefore, future studies should sort the patients by age as well as activity level. Moreover, future high quality RCTs are needed to draw accurate conclusions.

### Reference

1. Hu J, Qu J, Xu D, Zhou J, Lu H (2012) Allograft versus autograft for anterior cruciate ligament reconstruction: an up-to-date meta-analysis of prospective studies. *Int Orthop*. doi:10.1007/s00264-012-1720-5

Q. Wang (✉) · C.-z. Xiong  
Department of Orthopaedics, Subei People's Hospital of Jiangsu Province, Clinical Medical College of Yangzhou University, Yangzhou 225000, Jiangsu Province, People's Republic of China  
e-mail: wangqiangy2013@126.com