LETTER TO THE EDITOR

Response to the letter by J.Y. Jenny

We would like to thank Dr Jenny for his precise analysis of our article and his comments. We have the following responses to his questions:

- In relation to the statistical significance of the results: although the Rolimeter does indeed have a measurement error (of approximately 0.5 mm), this measurement error would be found in the estimation of variance. Because the results of the patients’ interventions were evaluated blindly, the measurement error is the same in both groups, and it does not invalidate the statistical significance of the results. A difference between the two study arms is validated independently from the size of any measurement errors that may exist (if the measurement error is by chance, or at least the same in both groups of patients, it cancels out, which was the case…). Moreover, it must be kept in mind that anterior laxity was the main judgement criteria defined at the outset for analysis, which increases the validity of our results. Indeed, in the absence of predefined main criteria (or if it had not been anterior laxity), we would have found ourselves with multiple tests and an increased risk of a Type I error, which would have required adjustment by a Bonferroni correction for example: and the difference would not have been significant in that case… Statistics are perfectly reliable if one does not try to grossly simplify them, but there is a limit;
- On the clinical significance. The question of whether the improvement in laxity of 0.7 at 1 year is observable by the patient and clinically significant is pertinent, but completely independent of the presence and extent of measurement errors. The results and discussion in our study clearly mention this limitation, especially since these were preliminary results. This prospective, randomized study was performed with the greatest scientific rigor using the means available to the investigators and despite the limited number of patients. It remains, to this day, a unique study on this topic for large French associations of orthopedic surgery.

Disclosure of interest

The author declares that he has no conflicts of interest concerning this article.

N. Pujol
Service d’orthopédie traumatologie,
hôpital de Versailles, 177, rue de Versailles,
78150 Le Chesnay, France
E-mail address: npujol@ch-versailles.fr

DOI of original article: http://dx.doi.org/10.1016/j.otsr.2013.09.007.