

**Handoll HH, Keding A, Corbacho B, et al.** Five-year follow-up results of the PROFHER trial comparing operative and non-operative treatment of adults with a displaced fracture of the proximal humerus. *Bone Joint J* 2017;99-B:383-392.

<https://doi.org/10.1302/0301-620X.99B3.BJJ-2016-1028>

**Authors' reply:**

30 November 2017

*Sir,*

Thank you for giving us the opportunity to respond to the letter by Rometsch et al about the PROFHER trial.<sup>1</sup>

We note that this AO Foundation-funded 'critical appraisal' of the PROFHER trial has been linked primarily with the report of the five-year follow-up<sup>1</sup> rather than with the main trial report published in *JAMA*<sup>2</sup> and the comprehensive National Institute for Health Research (NIHR) Health Technology Assessment (HTA) monograph.<sup>3</sup> Perusal by Rometsch et al of both of these reports will address many of their concerns; for example, about the expertise of the operating surgeons and on the availability of topic-specific estimates of the minimal clinically important change (MCID) for the Oxford Shoulder Score (OSS). Further pertinent insights are available in our article on defining the fracture population.<sup>4</sup>

We further refer Rometsch et al to our letter<sup>5</sup> detailing the unsound methods, analyses and conclusions of the meta-analysis conducted by Sabharwal et al.<sup>6</sup> Other unsound methodology is their suggestion for a per-protocol analysis. Such analysis is rarely, if ever, justified.<sup>7</sup>

Finally, we suggest that Rometsch et al examine the systematic approach taken in the critical appraisal of the PROFHER trial in a recent 'User's guide' to the medical literature relating to surgical trials.<sup>8</sup>

We hope that by taking these steps, Rometsch et al will accept that the conclusion of the trial was appropriate and applicable to the majority of patients with displaced proximal humeral fractures involving the surgical neck.

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**Conflict of Interest:** None declared