available at www.sciencedirect.com journal homepage: www.eu-openscience.europeanurology.com



## European Association of Urology

## Letter to the Editor

Re: Daniel D. Joyce, Matteo Soligo, Alessandro Morlacco, et al. Effect of Preoperative Multiparametric Magnetic Resonance Imaging on Oncologic and Functional Outcomes Following Radical Prostatectomy. Eur Urol Open Sci 2023;47:87–93

According to the study by Joyce et al. [1], use of multiparametric magnetic resonance imaging (mpMRI) rather than computed tomography before radical prostatectomy does not result in better oncological or functional outcomes. It is established that high-quality prostate mpMRI before biopsy allows accurate tumour localisation [2]. It follows that optimal MRI information should naturally result in better clinical decision-making and surgical planning. In particular, directing the surgeon to preservation or excision of the neurovascular bundle is one of the crucial surgical steps for which mpMRI should demonstrate value.

However, as well as the research by Joyce et al, a recent randomised controlled trial failed to demonstrate an improvement in the positive surgical margin rate when guided by preoperative mpMRI [3]. In neither study was there direct communication between the radiological and surgical teams to optimise the surgical plan. In this case, reliance is placed on the urologist to interpret a written imaging report for surgical decision-making, the primary aim of which was for detection and/or staging of the tumour at the time of interpretation, rather than to guide the surgical approach. Indeed, Rud et al. [3] acknowledged that better direct communication between radiologists and surgeons may have improved their study outcomes.

Conversely, a study by Park et al. [4] demonstrated that 43% of surgical decisions were meaningfully altered after the responsible surgeon and the radiologists evaluated the patient's mpMRI scans. A cooperative planning effort between imaging and other surgical specialists has also led to beneficial changes in surgical decision-making [5]. To assess the true benefits or otherwise of preoperative mpMRI, we suggest that in future studies a collaborative

specialist approach is probably required to translate and optimise imaging findings to nerve-sparing and other anatomic considerations in surgery.

Conflicts of interest: The authors have nothing to disclose.

## References

- [1] Joyce DD, Soligo M, Morlacco A, et al. Effect of Preoperative Multiparametric Magnetic Resonance Imaging on Oncologic and Functional Outcomes Following Radical Prostatectomy. Eur Urol Open Sci 2022;47:87–93. https://doi.org/10.1016/j.euros.2022.11. 018.
- [2] Ahmed HU, El-Shater Bosaily A, Brown LC, et al. Diagnostic accuracy of multi-parametric MRI and TRUS biopsy in prostate cancer (PROMIS): a paired validating confirmatory study. Lancet 2017;389:815–22.
- [3] Rud E, Baco E, Klotz D, et al. Does preoperative magnetic resonance imaging reduce the rate of positive surgical margins at radical prostatectomy in a randomised clinical trial? Eur Urol 2015;68:487–96. https://doi.org/10.1016/j.eururo.2015.02.039.
- [4] Park BH, Jeon HG, Jeong BC, et al. Influence of magnetic resonance imaging in the decision to preserve or resect neurovascular bundles at robotic assisted laparoscopic radical prostatectomy. J Urol 2014;192:82–8. https://doi.org/10.1016/j.juro.2014.01.005.
- [5] Dickerson EC, Alam HB, Brown RKJ, Stojanovska J, Davenport MS. Inperson communication between radiologists and acute care surgeons leads to significant alterations in surgical decision making. J Am Coll Radiol 2016;13:943–9.

Zafer Tandogdu <sup>a,b,\*</sup> Louise Dickinson <sup>b,c</sup>

<sup>a</sup> Department of Urology, University College London Hospitals, London, UK <sup>b</sup> Division of Surgery and Interventional Science, University College London, London, UK

<sup>c</sup> Department of Radiology, University College London Hospitals, London, UK

\*Corresponding author. Department of Urology, University College Hospital, Westmoreland Street, London W1G 8PH, UK. E-mail address: drzafer@gmail.com (Z. Tandogdu).

March 6, 2023

https://doi.org/10.1016/j.euros.2023.03.020

<sup>0302-2838/© 2023</sup> The Authors. Published by Elsevier B.V. on behalf of European Association of Urology. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

