Dear Editor,

We read with interest and concern the article by Macklin et al. ‘Tumour seeding in the tract of percutaneous renal tumour biopsy: a report on seven cases from a UK tertiary referral centre’ [1]. The authors report on 7 cases, although only 6 had renal tumour biopsy (RTB) using the recommended co-axial technique. The number of cases reported (1.2% in their own institution) is at odds with the meta-analysis and European Association of Urology guidelines, suggesting potential under-reporting in the literature [2, 3]. It is interesting that 6 of the 7 cases had papillary subtypes, which may be related to differences in biological behavior and a less distinct peritumoral pseudocapsule.

We disagree with the authors that their case series provides evidence that patients appear to be at risk of local recurrence, given that 6 out of 7 of the cases were recurrence-free at last follow-up (median follow-up of 11.5 months). The single case with a local recurrence had an open partial nephrectomy for a highgrade 5 cm central tumour in a solitary kidney. An alternative likely explanation for recurrence could be intraoperative implantation or tumour spillage, a plausible scenario given that there was a positive margin at initial surgery.

While the clinical significance of tumour seeding of the RTB tract is not yet known, the clinical significance and harm of not performing a RTB is well documented. Partial or radical nephrectomy is associated with 5% risk of ≥ Clavien 3 complication, and a 0.5% mortality rate [3]. Unfortunately, patients who undergo potentially avoidable surgery for benign tumours are exposed to the same risks. In a recent analysis of > 18.000 partial nephrectomies performed over a period of 7 years for seemingly malignant disease on imaging, benign tumour removal was consistent with year-over-year rates exceeding 30% [4]. Analysis of the BAUS nephrectomy audit over a four year period showed that of 1200 patients who had surgery for oncocytomas, almost half of them were > 70 years or had tumours < 4 cm [5]. Only 2.9 % had a prior RTB while the postoperative ≥ Clavien 3 complication rate was 4%, including 5 surgery-related deaths. RTB can help patients and surgeons avoid unnecessary interventions and the accompanying real risks associated with surgery and anesthesia, which by far exceed the number and percentages of reported needle tract seeding.

We are concerned that this article will further deter the use of RTB, the adoption of which is already uniformly poor [4, 5], despite the tangible benefits. The incidence of SRM is increasing, and likely to accelerate due to the growing use of imaging. In the absence of effective biomarkers, currently, RTB is the only tool available to help determine which tumours should be actively treated and which can be surveyed. Until more research is conducted and follow-up data matures, we advocate advising patients using the best available evidence. To that end, we recommend to continue to adhere to the EAU guidelines and use RTB whenever it may change a patient’s management pathway.


