

# Biopsy-based algorithm found accurate for small renal masses

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Compared with final pathology, biopsy of small renal masses can be accurately used in a treatment algorithm to direct management, according to research published in the February issue of *The Journal of Urology*.

(HealthDay)—Compared with final pathology, biopsy of small renal masses (SRMs) can be accurately used in a treatment algorithm to direct management, according to research published in the February issue of *The Journal of Urology*.

Schuyler J. Halverson, M.D., of the University of Michigan Health System in Ann Arbor, and colleagues assessed the accuracy of a biopsy-directed treatment algorithm for correctly assigning 133 patients with SRMs (<4 cm) to treatment or active surveillance.

Using a biopsy-directed treatment algorithm, 36 patients with SRMs were assigned to surveillance and 97 were treated. Based on the final [pathology](#), the researchers found that 31 percent of those patients for whom surveillance was recommended should have received treatment, while no patients moved from treatment to surveillance. Seven of the 11 misclassified cases had a biopsy indicative of grade 1 clear cell [renal cancer](#), which was upgraded to grade 2 or 3. Overall agreement between biopsy and final pathology was 92

percent; however, after adjustment of the algorithm to avoid undergrading of clear cell renal cancer, agreement improved to 97 percent, with negative and positive predictive values of 0.86 and 1.0, respectively.

"Image guided, percutaneous renal mass biopsy is highly accurate for diagnosis in most patients and provides valuable information to guide the management of SRM," the authors write. "We have shown that although slight [discrepancies](#) may exist between initial biopsy and final pathology due to the heterogeneous nature of some tumors, this variability becomes clinically irrelevant when using a well-defined management protocol."

**More information:** [Abstract](#)  
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